

## UPDATED INFORMATIVE DIGEST OF PROPOSED ACTION

**Sections Affected:** Proposed adoption of Title 17, California Code of Regulations (CCR), Sections 94010-94015 and Sections 94150-94160 which incorporate by reference certification procedures and test procedures identified below in bold type. Proposed repeal of Title 17, CCR, Sections 94000-94004, and 94007. Proposed amendments to Title 17, CCR, 94148, and 94149.

### **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.

State law gives districts the primary responsibility for controlling air pollution from non-vehicular sources such as gasoline marketing, storage, and transfer operations. With the exception of cargo tanks, districts for compliance purposes are authorized by H&SC Section 41954(g) to adopt procedures and performance standards more stringent than those adopted by the Board. H&SC Section 39607(d) requires the Board to adopt test procedures to determine compliance with its non-vehicular emission standards and those of the districts.

Since 1975, the Board, pursuant to H&SC Sections 39607(d) and 41954, adopted four certification procedures and two test procedures (Sections 94000-94004 and 94007, Title 17, CCR). These procedures describe the criteria for certifying gasoline vapor recovery systems for service stations, bulk plants, terminals, and cargo tanks. 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 0.9 pounds per 1000 gallon 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.

Subsequent to the June 29, 1995 Public Hearing, and at the direction of the Board, a 15 day notice of changes was prepared and distributed to interested parties, based on comments

received during the 45 day public comment period, and at the Public Hearing, itself. The Final Statement of Reasons provides a discussion of comments and staff responses.

#### **Description of the Proposed Regulatory Action**

The Board's staff is proposing to delete Title 17, CCR, Sections 94000-94004 and 94007. Sections 94000-94004 and 94007 incorporate, by reference, the following certification or test procedures:

- Section 94000      Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations (first adopted December 9, 1975 and last amended September 1, 1982)
- Section 94001      Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations (first adopted March 30, 1976 and last amended December 4, 1981)
- Section 94002      Certification and Test Procedures for Vapor Recovery Systems at Bulk Plants (first adopted April 18, 1977 and last amended September 12, 1990)
- Section 94003      Certification and Test Procedures for Vapor Recovery Systems at Gasoline Terminals (first adopted April 18, 1977 and last amended September 12, 1990)
- Section 94004      Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks (first adopted April 18, 1977 and last amended February 24, 1984)
- Section 94007      Test Procedures for Gasoline Vapor Leak Detection Using Combustible Gas Detector (first adopted September 1, 1982)

The Board's staff proposes to replace Title 17, CCR, Sections 94000-94004 and 94007 with Title 17, CCR, Sections 94010-94015. Sections 94010-94015 would incorporate by reference the following certification and test procedures as set forth below:

- Section 94010      "D-200" - Definitions for Certification and Test Procedures for Vapor Recovery Systems (Adopted: [date of adoption])
- Section 94011      "CP-201" - Certification Procedure for Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])  
  
"TP-201.1" - Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities without Assist Processors (Adopted: [date of adoption])

**"TP-201.1A" - Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors (Adopted: [date of adoption])**

**"TP-201.2" - Determination of Efficiency of Phase II Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

**"TP-201.2A" - Determination of Vehicle Matrix for Phase II Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

**"TP-201.2B" - Determination of Flow vs. Pressure for Equipment in Phase II Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

**"TP-201.2C" - Determination of Spillage of Phase II Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

**"TP-201.3" - Determination of Two Inch (WC) Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

**"TP-201.3A" - Determination of Five Inch (WC) Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks (Adopted: [date of adoption])**

**"TP-201.3B" - Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks (Adopted: [date of adoption])**

**"TP-201.4" - Determination of Dynamic Pressure Performance of Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

**"TP-201.5" - Determination of Air to Liquid Volume Ratio of Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

**"TP-201.6" - Determination of Liquid Blockage of Phase II Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption])**

Section 94012

**"CP-202" - Certification Procedure for Vapor Recovery Systems of Bulk Plants (Adopted: [date of adoption])**

**"TP-202.1" - Determination of Emission Factor of Vapor Recovery Systems of Bulk Plants (Adopted: [date of adoption])**

Section 94013

**"CP-203" - Certification Procedure for Vapor Recovery Systems of Terminals (Adopted: [date of adoption])**

**"TP-203.1" - Determination of Emission Factor of Vapor Recovery Systems of Terminals (Adopted: [date of adoption])**

Section 94014

**"CP-204" - Certification Procedure for Vapor Recovery Systems of Cargo Tanks (Adopted: [date of adoption])**

**"TP-204.1" - Determination of Five Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks (Adopted: [date of adoption])**

**"TP-204.2" - Determination of One Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks (Adopted: [date of adoption])**

**"TP-204.3" - Determination of Leak(s) (Adopted: [date of adoption])**

Section 94015

**"CP-205" - Certification Procedure for Vapor Recovery Systems of Novel Facilities (Adopted: [date of adoption])**

**"TP-205.1" - Determination of Efficiency of Phase I Vapor Recovery Systems of Novel Facilities (Adopted: [date of adoption])**

**"TP-205.2" - Determination of Efficiency of Phase II Vapor Recovery Systems of Novel Facilities (Adopted: [date of adoption])**

Finally, the staff proposes to amend Title 17, CCR, Sections 94148 and 94149 that currently deal with the vapor recovery certification and test procedures for bulk plants and terminals. The proposed adoption of Title 17, CCR, Sections 94150-94160 would incorporate, by reference, the above mentioned definitions and test procedures for gasoline dispensing facilities, bulk plants, terminals, cargo tanks, and novel facilities.

### **Comparable Federal Regulation**

There are no comparable federal regulations that certify gasoline vapor recovery system for service stations, bulk plants, cargo tanks, and novel facilities. The U.S. Environmental Protection Agency (U.S. EPA) has established an emission limit of 0.29 pounds of hydrocarbons per 1000 gallons of gasoline dispensed (lbs/1000 gal) for gasoline distribution terminals. The proposal will change the performance standard for terminals from 0.90 to 0.29 to conform with federal requirements. For regions outside of California not meeting the federal ambient ozone standard, the U.S. EPA requires the installation of the ARB certified vapor recovery systems at service stations.

### **Rationale**

The proposal will improve and update the existing vapor recovery systems certification and test procedures. In anticipation of new vapor recovery technologies, the proposed procedures provide the Executive Officer with guidance for evaluating new technologies not currently developed.

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 if the installed system 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 except when a district has established its own test procedures concerning the same subject as a Board test procedure.

The control efficiency performance standard for vapor recovery systems at service stations remains at 90%. The applicant is given an option of whether to certify the system at 90% or 95%. The proposed test procedure for determining compliance with the performance standard is based on direct measurement rather than having the efficiency determined by a statistical technique.

The control efficiency performance standard for bulk plants remains at 90%.

The performance standards for terminals is changed from 0.9 to 0.29 to conform with the U.S. EPA's New Source Performance Standard (NSPS) for Bulk Gasoline Terminals. Since terminals must currently meet the NSPS, the proposed change will have no effect other than to bring the California standard into conformity with federal requirements.

For cargo tanks, the annual certification performance standards are revised by reducing the "allowed pressure change in five minutes" (five minute standard) by 50% as a function of tank capacity. The proposed requirements do not represent a change in stringency because cargo tank operators historically operate at the proposed limit. The staff also proposes a one-minute test for compliance testing. The one-minute test is easier to conduct and is less disruptive to the cargo tank operator because the one-minute test is conducted with fuel in a cargo tank whereas the five minute test requires an empty cargo tank.

The staff is proposing new certification and test procedures for "novel facilities." A "novel facility" is a facility other than a service station that dispenses gasoline to vehicles. Examples of "novel facilities" include above ground tanks, mobile refuelers, and dispensing bulk plants. The control efficiency performance standard is 90%. Applicants will have the option of deciding whether to certify the system at the 90% or 95% level.

Five workshops were held on March 26, 1992, October 29, 1992, April 1, 1993, November 16, 1993, and February 15, 1995, 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.