State of California
California Environmental Protection Agency
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text

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

Public Hearing Date: June 29, 1995
First Public Availability Date: September 11, 1995
First Deadline for Public Comment: September 26, 1995
Second Public Availability Date: February 26, 1996
Second Deadline for Public Comment: March 12, 1996

On June 29, 1995, the Air Resources Board (the "Board" or "ARB") adopted Resolution 95-27, in which the Board approved the adoption of the following procedures for certifying and testing of gasoline vapor recovery systems installed at gasoline marketing operations (service stations and novel facilities (which 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).

"D-200" - Definitions for Certification and Test Procedures for Vapor Recovery Systems (Adopted: [date of adoption])

"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])

"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])

"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])

"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])

"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])

The Board also approved the adoption of Title 17, California Code of Regulations (CCR), Sections 94010 to 94015, which incorporates by reference the five certification procedures and 19 test methods for gasoline dispensing facilities, bulk plants, terminals, cargo tanks, and novel facilities. In addition, the 19 test methods are also referenced in, Title 17, CCR, Sections 94148 to 94160 and could be used by the Districts in determining the performance of gasoline dispensing facilities, bulk plants, terminals, cargo tanks, and novel facilities.

As approved by the Board, the certification procedures and test methods contain modifications to the originally proposed text released with the May 12, 1995 Staff Report. The modifications were mentioned by the staff during the Board hearing. The modifications (called the "first set of fifteen day changes") were proposed by staff with a public availability date of September 11, 1995. The deadline for public comment was September 26, 1995.

Since considering public comments received during the first fifteen day public comment period, the staff has decided to further modify the text of the procedures and make the modifications available for public comment.

Attached is a copy of Board Resolution 95-27, which approves the certification procedures and test methods for the gasoline vapor recovery systems. Attachment A contains the further modifications to CP-201 - Certification Procedure for Vapor Recovery Systems of Dispensing Facilities. The modifications are shown in strike-and-add format. Deletions are shown by ~~redlining and strikeout~~ and additions are shown by redlining.

The modifications shown in Attachment constitute the staff's second set of fifteen day changes. They were prompted by comments from Gilbarco, Inc which pointed out that while a pressure specification at -28 "WC is appropriate for an assist system, a pressure specification at +28 "WC is not. This is due to the fact that the vacuum pump in an assist system operates at large negative pressures in a system. The positive pressure specification at +2 "WC is retained as characteristic of pressure effects due to thermal and molar changes in the air/vapor mixture in a system.

Finally, the exemption from the -28 "WC pressure specification in item (3) is provided due to the nature of balance systems which, having no vacuum pump, can not have such large negative gauge pressures.

In accordance with Section 11346.8 of the Government Code, the Board directed the Executive Officer to adopt sections 94010 through 94015, 94150 through 94160 and the incorporated test procedures and definitions; amend 94148 and 94149 and the incorporated vapor recovery certification and test procedures for bulk plants and terminals; and to repeal sections 94000 through 94004, and 94007, Title 17, California Code of

Regulations, after making them available to the public for comment for a period of at least 15 days. The Board further provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if warranted.

Written comments on the modifications approved by the Board must be submitted to the Board Secretary, Air Resources Board, P. O. Box 2815, Sacramento, California 95812, no later than March 12, 1996, for consideration by the Executive Officer prior to final action. Only comments relating to the above-referenced modifications shall be considered by the Executive Officer.

Attachments

ATTACHMENT A

4.2.4 **Vapor Return Valves**

4.2.4.1 **Performance Specification**

Every vapor recovery system shall use a vapor return valve in every vapor return path to the storage tank to control release of vapors to the atmosphere and ingestion of air into the vapor space volume during "idle nozzle" periods; an exception shall be provided for cases in which it has been demonstrated to the satisfaction of the ARB Executive Officer that vapor recovery performance is better without a vapor return valve.

In no case shall any vapor return path have more than one check valve whose closing force is only due to mechanical force (spring-type force) rather than, for example, electromagnetic force (solenoid-type force).

The flow versus pressure specifications provided below establish specifications of minimum stringency. The ARB Executive Officer can require more stringent specifications as technology improves.

At a minimum, vapor return valves shall each be successfully tested once by the valve manufacturer.

Each vapor return valve shall be:

(1) incorporated into the design and function of each dispensing nozzle, unless the volume between a vapor return valve location remote from the nozzle and the tip of the nozzle is less than 0.02 cubic feet and

(2) tested by the valve manufacturer per TP-201.2B with a performance specification for flow versus positive gauge pressure of:

~~[0.00046 CFM @ +1.00 "WC];~~

~~[0.00063 CFM @ +2.00 "WC];~~

~~[0.000083 CFM @ ≥ +27.00 "WC];~~

0.038 CFH @ +2.00 "WC;

(3) tested by the valve manufacturer per TP-201.2B with a performance specification for flow versus negative gauge pressure of:

~~[0.00045 CFM @ -1.00 "WC];~~

~~[0.00063 CFM @ -2.00 "WC];~~

~~[0.000083 CFM @ ≥ -27.00 "WC];~~

0.005 CFH @ -27.69 "WC [-1.00 psi].

~~Item (3) shall not be required for balance system vapor return valves.~~