

State of California
AIR RESOURCES BOARD

**Final Statement of Reasons for Rulemaking,
Including Summary of Comments and Agency Response**

AMENDMENTS TO VAPOR RECOVERY CERTIFICATION AND TEST PROCEDURES
FOR UNDERGROUND AND ABOVEGROUND STORAGE TANKS INCLUDING
GASOLINE DISPENSING FACILITY HOSE REGULATION

Public Hearing Date: September 22, 2011
Agenda Item No.: 11-7-4

I. GENERAL

The Staff Report: Initial Statement of Reasons for Rulemaking (staff report), entitled *Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider the Proposed Adoption of Amendments to Vapor Recovery Certification and Test Procedures for Underground and Aboveground Storage Tanks Used at Gasoline Dispensing Facilities Including Gasoline Dispensing Facility Hose Regulation*, released August 3, 2011, is incorporated by reference herein.

State law requires that all vapor recovery equipment at gasoline dispensing facilities (GDF) must be certified by the Air Resources Board (Board or ARB) before it can be offered for sale, sold, or installed in California. Control of hydrocarbon emissions (gasoline vapor) by vapor recovery equipment is necessary to reduce the formation of ozone and to control benzene emissions, a constituent of gasoline vapor that has been identified as a toxic air contaminant. In March 2000, ARB approved the Enhanced Vapor Recovery (EVR) regulation, which established new performance standards and specifications for vapor recovery systems and components to further reduce emissions during the storage and transfer of gasoline at GDFs, and to increase system and component reliability. The EVR program has been implemented for GDFs with underground tanks, and is currently being implemented for GDFs with aboveground tanks. While the EVR program has been successful in meeting its goals of reducing emissions and improving vapor recovery equipment reliability, ARB staff have identified areas within the existing EVR Certification and Test Procedures where minor amendments could be made to improve clarity, reduce uncertainty among the regulated community, and provide for additional emission reductions.

Description of Board Action

On September 22, 2011, the Board conducted a public hearing to consider ARB staff's proposed regulations for amendments to existing vapor recovery certification and test procedures. After consideration of written comments received during the 45-day public comment period prior to the hearing and

testimony received at the public hearing, the Board adopted Resolution 11-29 to approve modifications to the certification and test procedures that are incorporated by reference.

In accordance with section 11346.8 of the Government Code, the Resolution directed the ARB Executive Officer to incorporate modifications into the proposed regulatory text, with such other conforming modifications as may be appropriate, and to make the modified text available for a supplemental comment period of at least 15 days.

The text of all the modifications to the originally posted certification and test procedures was made available for a supplemental 15-day public comment period by issuance of a "Notice of Public Availability of Modified Text." This Notice was mailed on February 9, 2012, to all parties that submitted written comments during the 45-day public comment period. The Notice was also mailed to other persons generally interested in the ARB's rulemaking concerning vapor recovery requirements. The "Notice of Public Availability of Modified Text" listed the ARB website from which interested parties could obtain the complete text of the incorporated documents that would be affected by the modifications to the original proposal, with all the modifications clearly indicated in strikeout and underline format. These documents were also posted on February 9, 2012, on ARB's website at <http://www.arb.ca.gov/regact/2011/evr11/evr11.htm>.

The amendments are to the regulations in title 17, California Code of Regulations (CCR), sections 94010, 94011, 94016, 94150, and 94168.

The amended certification and test procedures are:

- D-200 – *"Definitions for Vapor Recovery Procedures"*
- CP-201 – *"Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities"*
- CP-206 – *"Certification Procedures for Vapor Recovery Systems at Gasoline Dispensing Facilities Using Aboveground Storage Tanks"*
- TP-201.1 – *"Volumetric Efficiency for Phase I Systems"*
- TP-201.2 – *"Efficiency and Emission Factor for Phase II Systems"*
- TP-201.2A – *"Determination of Vehicle Matrix for Phase II Systems"*
- TP-201.2I – *"Test Procedure for In-Station Diagnostic Systems"*
- TP-201.2J – *"Pressure Drop Bench Testing of Vapor Recovery Components"*
- TP-201.3 – *"Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities"*
- TP-206.3 – *"Determination of Static Pressure Performance of Vapor Recovery Systems of at Gasoline Dispensing Facilities with Aboveground Storage Tanks"*

The amended certification and testing procedures were made available during the regulatory action and will continue to be available after the regulatory action is finalized on ARB's website, as well as in print, upon request. Because certification and test procedures will be used by a very limited number of people, ARB has determined that it would be cumbersome, unduly expensive, and otherwise impractical to publish the document in the CCR.

On July 26, 2012, the Executive Officer issued Executive Order R-12-004, adopting the amendments to the regulations and the Certification and Test Procedures. The Certification and Test Procedures that have been modified in this rulemaking will be identified by a *Last Amended Date* that corresponds to the date the Executive Order was signed. The same *Last Amended Date* will be inserted each time those Certification and Test Procedures are referenced in the California Code of Regulations, title 17, sections 94010, 94011, 94016, 94150, and 94168.

Fiscal Impact: In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons and businesses. In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action will not have an impact on the creation or elimination of new jobs within the State of California, and will not have an impact on the creation of new businesses and the elimination of existing businesses within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the Initial Statement of Reasons (ISOR).

Pursuant to Government Code section 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action would not create costs or savings to any state agency or in federal funding to the state, costs or mandates 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 cost or savings to state or local agencies.

The Executive Officer has determined that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses including the ability of California businesses to compete with businesses in other states, or on representative private persons.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action would not affect small businesses.

The Board has further determined that no reasonable alternative considered by the Board or that has otherwise been identified and brought to the attention of the Board would be more effective in carrying out the purpose for which the action is proposed or would be as effective as and less burdensome to affected private persons or businesses than the proposed action.

II. MODIFICATIONS TO THE ORIGINAL PROPOSAL

At the hearing on September 22, 2011, ARB staff presented, and the Board approved, proposed modifications to the regulations that were exactly as described in the Staff Report released on August 3, 2011. Subsequent to the hearing, as authorized by the Board in Resolution 11-29, staff proposed additional conforming modifications that simplify and improve clarity of the Certification Procedures. The modifications, described below, affect the text of certification procedures CP-201 and CP-206.

A. Modifications to CP-201 and CP-206

As originally noticed, CP-201 and CP-206 included new sections (2.4.9 of CP-201 and 2.4.8 of CP-206) that described a process whereby any individual could petition the Executive Officer for an engineering evaluation to determine whether the first certified system to meet a specification or standard was incompatible with certain types of GDFs. Comments received during the 45-day public comment period indicated that this proposal was not well understood, leading staff to conclude that these sections were not sufficiently clear. After further research into the issue, staff determined that the proposed sections were not necessary because the current Certification Procedures already authorize the Executive Officer to delay effective and operative dates in the event that no equipment meeting those standards is commercially available. This existing commercial availability provision can be used to address situations where EVR systems are incompatible with certain types of GDF, and in fact this has been done several times already.

B. Changes without Regulatory Effect

CP-206, section 19.1.6 has been amended to refer to section 12 instead of section 11. CP-206 contains language, and in some cases entire sections, identical to CP-201. Originally, the language in CP-206 section 19.1.6 was copied from CP-201 section 18.1.5. In both cases, the reference should point to the "APPLICATION PROCESS" section of the CP. In CP-201 the "APPLICATION PROCESS" is section 11, but in CP-206 it is section 12. The reference in CP-206 has been corrected to point to section 12.

III. SUMMARY OF COMMENTS AND AGENCY RESPONSES

During the 45-day comment period, the Board received comments from:

ORGANIZATION	REPRESENTATIVE
Veyance Technologies	Andy Spiedel
California Independent Oil Marketers Association (CIOMA)	Jay McKeeman (written)

During the 15-day comment period, the Board received comments from:

California Independent Oil Marketers Association (CIOMA)	Jay McKeeman (written)
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The following is a summary of each comment and the staff's response.

1. Comments Received During the 45-Day Comment Period

Comment by Andy Spiedel, Veyance Technologies

Comment: Manufacturers were previously informed that the proposed effective date for low permeation GDF hoses would be July 1, 2013. Why has this changed? Manufacturers need clearly defined dates to plan and budget for new product approvals and production startup.

Response: During pre-rulemaking workshops, July 1, 2013 was discussed as a possible effective date for the GDF hose permeation standard. Staff determined that setting a fixed effective date would be inconsistent with the "four-year clock" proposal that was included as part of this rulemaking. That four-year clock provision specifies that all future effective dates, including the GDF hose permeation standard, will be set when the first system is certified. Staff acknowledges that, in some instances, this may lead to some difficulties in planning on the part of vapor recovery system manufacturers. However, this inconvenience is more than offset by the additional clarity that the four-year clock provision provides the thousands of GDF owner/operators in California who are subject to vapor recovery requirements.

In the example of the new GDF hose permeation standard, the first hose certified to meet the standard will establish the effective date. All GDF operators would have four years from the first hose certification date to switch to an ARB certified low permeation hose. This provides other hose manufacturers up to four years to develop and obtain certification for their low permeation GDF hoses and compete in the market for facilities that are upgrading their existing hoses to meet the deadline. There is an incentive for manufacturers to be first to develop and certify a new system, but other manufacturers still have ample opportunity to enter and compete in the market.

Comments by Jay McKeeman, California Independent Oil Marketers Association (CIOMA)

Comment 1: CIOMA is concerned with the staff explanation of the petition process and the criteria used to determine if a waiver or delay of retrofit requirements will be allowed. It seems to hinge on a technical review of the petition. The concern is that this technical review will focus entirely on the

ability to physically employ technology, regardless of cost, inconvenience and system operation/durability/safety. The interpretation of a incompatibility might ignore the financial aspect of practicability.

Response: ARB staff agrees with the commenter that there is a lack of clarity with the proposed petition process and criteria used to determine whether an EVR system is incompatible with certain GDF types. The proposed petition process was intended to address unforeseen incompatibility issues that may arise in the future. The specific nature of these future incompatibilities cannot be fully predicted or anticipated. Because of this, staff found that it was not possible to define the petition process or decision-making criteria in a sufficiently clear manner, while still ensuring that it would be applicable to all possible future incompatibilities. Staff determined that the best course of action was to delete the proposed petition process and instead continue to use the current regulatory authority and administrative mechanism for addressing instances where EVR systems are determined by the Executive Officer to be incompatible with certain GDF types.

Comment 2: CIOMA does not support the low permeation GDF hose standard because requiring additional expenses for station owner/operators during this stressed economy is poor judgment. ARB estimates that the new hoses will cost approximately \$10 more than current hoses, but the commenter is skeptical of this estimate.

Response: The low permeation GDF hose standard is needed for California to maintain its progress towards attainment of the federal National Ambient Air Quality Standard for ozone. The implementation of GDF hose standard is expected to result in a cost savings when factoring the cost of gasoline that is not lost through hose permeation.

Staff's estimate of an increase in cost of \$10 per hose is based on information from the major GDF hose manufacturers, many of whom were directly involved in the development of the ARB proposal. The commenter does not raise any specific concerns on the methods used to develop our cost estimates, nor provides any alternative cost estimates for us to evaluate. In the absence of specific cost data or alternatives, staff stands by the cost estimates published in the Initial Statement of Reasons.

Comment 3: CIOMA is skeptical of the emission estimates used to justify the proposed low permeation GDF hose standard and the requirement.

Response: The estimated emissions reductions noted in the Staff Report are based on three primary factors: the uncontrolled GDF hose permeation rate, the controlled GDF hose permeation rate, and the number of hoses affected statewide. These factors are discussed below.

1. The uncontrolled GDF hose permeation rate was based on extensive testing conducted by ARB staff over several years. No recognized test protocol existed for quantifying GDF hose permeation rates, so staff researched and followed the basic elements of Society of Automotive Engineers (SAE) standards applicable to fuel hoses used in other applications. The results of all GDF hose permeation testing have been published, made available online, and presented during public workshops by ARB staff.
2. The controlled GDF hose permeation rate was assumed to be the 10 grams per square meter per day, which is the maximum rate allowed by the proposed regulation. Preliminary Underwriters Laboratories (UL) testing of low permeation GDF hoses indicates that the actual permeation rate may be lower, but the maximum allowable permeation rate is used in staff calculations to eliminate the possibility of overestimating emissions reductions.
3. Estimates of statewide GDF hose population were based on actual GDF permit information collected from the two largest districts and then projected for the entire state.

All assumptions (e.g., average daily temperature, number of affected hoses, average hose length, etc.) used to extrapolate per-hose emissions reductions to statewide emission reductions have been clearly outlined for review and comment. The commenter does not raise any specific concerns on the methods used to develop our emission estimates, nor provides any alternative emission estimates for us to evaluate. In the absence of specific concerns or alternatives, staff stands by the emission estimates published in the Initial Statement of Reasons.

Comment 4: CIOMA is worried that new hoses designed to meet the low permeation GDF standard will potentially not live up to durability/safety expectations, leaving owner/operators with the responsibility and cost of equipment replacement.

Response: There is no evidence to suggest that the durability of GDF hoses will be reduced in any way by the adoption of a permeation standard. Hose manufacturers have indicated that they will simply add a permeation inhibiting layer (barrier layer) to their current hose construction, which should in no way reduce current durability. This approach has been used successfully in other applications by these same hose manufacturers. Additionally, independent testing organizations such as Underwriters Laboratories will continue to conduct the same rigorous testing as in the past to help ensure hose durability.

Comment 5: CIOMA suggests that adoption of a low permeation GDF hose standard should be postponed until the emissions reductions from overall EVR performance are better understood and ARB has finished its regulations improving warranty protection and information sharing on EVR equipment and systems.

Response: ARB staff intends to continue with the ongoing projects of reviewing the overall emissions reductions from the EVR program and improving warranty protection for EVR equipment owners. However, staff sees no reason to delay implementing GDF hose permeation standards until those tasks are completed.

2. Comments Received During the 15-Day Comment Period

Comment by Jay McKeeman, California Independent Oil Marketers Association (CIOMA)

Comment: Upon reviewing the proposed 15-day changes, CIOMA was opposed to amendment removing the originally proposed process for requesting a determination of EVR system incompatibility. However, after discussions with ARB staff CIOMA withdraws their opposition on the condition that ARB staff provides an advisory to the regulated community within 30 days after final approval of the regulation package. This advisory would outline the method to present concerns about the applicability of certified equipment to a particular situation or system or to indicate other difficulties being experienced in maintaining compliance with the EVR requirements.

Response: Staff is pleased that CIOMA understands and supports the proposed amendment. We concur with CIOMA that an effort should be made to inform the regulated community of the process that is available to address cases where EVR systems may be incompatible with certain GDF types. We also concur that this can best be accomplished by issuing an advisory letter on the subject. Staff has already prepared a draft of this advisory. Staff will collaborate with CIOMA to ensure that the final advisory satisfies our shared goal of informing the regulated community about the process for addressing incompatible EVR systems.

In regards to the comment about GDF owners/operators having difficulties in maintaining compliance with EVR requirements, ARB has recently implemented a process where anyone can notify ARB of any problems or complaints with vapor recovery systems or components. To start the process, the form at http://www.arb.ca.gov/vapor/in_use/complaint_form.htm must be completed and sent electronically to ARB. ARB staff will contact the person, if there are questions, investigate the problem or complaint, and provide a response.