

UPDATED INFORMATIVE DIGEST

AMENDMENTS TO CERTIFICATION AND TEST PROCEDURES FOR VAPOR RECOVERY SYSTEMS AT GASOLINE DISPENSING FACILITIES (GDFs) AND CARGO TANKS

Sections Affected:

Amendments to California Code of Regulations, title 17, sections 94014 and 94016.

Background:

In California, gasoline vapor emissions are controlled during the transfer of gasoline from storage tanks at terminals or bulk plants to tanker trucks (called cargo tanks) that transport gasoline to dispensing facilities (GDFs or service stations), at which gasoline is transferred into vehicles. Cargo tanks are tested annually to ensure that they do not exceed an allowable leak rate. At GDFs, gasoline vapor is collected during two types of gasoline transfers. Phase I vapor recovery collects vapors during bulk fuel distribution, when a tanker truck fills the service station storage tank. The gasoline vapor displaced from filling these storage tanks is transferred to the tanker trucks. The gasoline vapor inside the tanker truck is then recovered at the terminal when a new load of gasoline fills the tanker. Phase II vapor recovery collects vapors during vehicle refueling by the gasoline consumer. The vapor recovery collection efficiency during both of these transfers is determined through certification of vapor recovery systems.

Vapor recovery regulations for both cargo tanks and gasoline dispensing facilities have been amended by the Board several times since their original adoption in the 1970's. Those amendments have served several purposes: to tighten existing standards and specifications, to impose new standards and specifications, to correct technical deficiencies, to accommodate new technologies, to provide more clarity to certification and test procedures, or to ease implementation of vapor recovery requirements on affected owners and operators.

Description of Regulatory Action:

At the July 25, 2013 public hearing, the Board approved the proposed amendments, summarized below, as they were noticed on June 5, 2013, in the California Notice Register and as set forth in the Staff Report: Initial Statement of Reasons released on June 5, 2013.

TP-201.1 – “*Volumetric Efficiency for Phase I Systems*” was amended to better accommodate its use on aboveground storage tank systems, which are generally smaller and subject to more rapid temperature fluctuations than underground tank systems. These changes were withdrawn after the 15-day public comment period, as described in more detail below.

TP-206.2 – “*Determination of Emission Factor for Standing Loss Control Vapor Recovery Systems Using Processors at Gasoline Dispensing Facilities Using Aboveground Storage Tanks*” was amended to accommodate more modern sampling equipment, and to provide additional flexibility that is necessary to conduct testing on a wide variety of storage tank configurations encountered in the field.

CP-204 – “*Certification Procedure for Vapor Recovery System of Cargo Tanks*”, which was first adopted on April 18, 1977 and was last amended on March 17, 1999, has been replaced with a new version. This change was made to reflect the fact that ARB’s cargo tank program is focused on annual performance testing of each cargo tank rather than certification of the individual components and vapor recovery systems that are used on cargo tanks. The change also helps to harmonize California’s cargo tank requirements with federal requirements.

TP-204.1 – “*Determination of Five Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks*” has been amended to allow for the use of United States Environmental Protection Agency (U.S. EPA) Method 27, with minor amendments, as an equivalent test procedure. This change will allow cargo tank operators to conduct a single test annually that can be used to show compliance with both ARB and United States Department of Transportation requirements. Additional changes are proposed to TP-204.1 that will improve clarity and be more consistent with other ARB test procedures.

TP-204.2 – “*Determination of One Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks*” has been amended to improve clarity and be more consistent with other ARB test procedures.

TP-204.3 – “*Determination of Leak(s)*” has been amended to improve clarity and be more consistent with other ARB test procedures.

TP-206.4 - “*Volumetric Efficiency of Phase I Systems for Aboveground Storage Tanks*”. Due to comments received during the 45-day public comment period, the proposed changes to test procedure TP-201.1 – “*Volumetric Efficiency for Phase I Systems*” were withdrawn. Those changes were originally intended to make the procedure appropriate for testing aboveground storage tanks (AST) by addressing certain technical deficiencies encountered by staff during field testing. However, comments received during the public comment period prompted staff to improve upon the original proposal by devising a method to quantify standing loss emissions prior to conducting a Phase I transfer, then subtracting those emissions from the emissions observed within one hour after the transfer is completed. In light of these modifications resulting from comments received, staff has determined that it is more appropriate to include the amendments initially proposed for inclusion in TP-201.1 into a separate test procedure, TP-206.4. TP-206.4 is based on TP-201.1 but addresses the standing loss emissions that are specific to ASTs. Thus TP-206.4 addresses the technical limitations of using TP-201.1 for AST testing, contains the additional improvements resulting from public comments, and greatly enhances the clarity and readability of the amendments.

Consequently, the amendments that were originally proposed to TP-201.1 were withdrawn and TP-201.1 will remain unchanged from the current version (last amended July 26, 2012). These changes and their technical basis are described in the Final Statement of Reasons.

Title 17, CCR, section 94016, and CP-206 – “Certification Procedures for Vapor Recovery Systems at Gasoline Dispensing Facilities Using Aboveground Storage Tanks” has been amended to incorporate and refer to the newly titled TP-206.4.