

UPDATED INFORMATIVE DIGEST

AMENDMENTS TO CERTIFICATION PROCEDURES FOR VAPOR RECOVERY SYSTEMS FOR ABOVEGROUND STORAGE TANKS AT GASOLINE DISPENSING FACILITIES

Sections Affected:

Amendments to California Code of Regulations, title 17, §§ 94010 and 94016.

Documents Incorporated by Reference:

The following documents are incorporated in the regulation by reference in California Code of Regulations, title 17, §§ 94010 and 94016, respectively:

- D-200 – Definitions for Vapor Recovery Procedures, adopted April 12, 1996, as last amended on July 25, 2019.
- CP-206 – Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities Using Aboveground Storage Tanks, adopted May 2, 2008, as last amended on July 25, 2019.

The above listed documents are also being amended by this regulation and thus the amendment is the date that the regulation was approved by the California Air Resources Board (CARB or Board).

In addition, the following document would be incorporated in the regulation by reference in D-200:

- Underwriters Laboratories Inc. (UL). UL-2085 Standard for Safety – Protected Aboveground Tanks for Flammable and Combustible Liquids. Edition 2, Revision 3; September 29, 2010.

Proposed Regulatory Action:

CARB staff has proposed amendments to the vapor recovery definitions and certification procedure relating to the transfer of gasoline from aboveground storage tanks (AST) to vehicles, called Phase II vapor recovery. First, the proposed amendments would add commonly utilized terms and definitions to the vapor recovery definitions. Second, the proposed amendments would align the enhanced vapor recovery (EVR) requirements for Phase II with the Phase I EVR standards, which were amended in 2015, by establishing an annual gasoline throughput threshold for the immediate upgrade to Phase II EVR for certain ASTs. Other ASTs would be allowed to maintain their currently installed systems until the end of useful life, and then upgrade to Phase II EVR if vapor recovery is required by the local air pollution control/air quality management district (Air District).

Background and Effect of the Proposed Regulatory Action:

California's vapor recovery program controls emissions associated with the storage and transfer of gasoline from storage tanks at terminals or bulk plants to tanker trucks, from tanker trucks to storage tanks at gasoline dispensing facilities (GDF), and from GDF

tank to the vehicle's fuel tank during vehicle fueling. CARB and the Air District share responsibility for implementing the vapor recovery program. CARB staff certifies prototype vapor recovery systems installed at operating GDFs. State law requires that throughout California only CARB-certified systems be offered for sale, sold, and installed. Air District rules require GDF operators to install and maintain vapor recovery systems to prevent release of gasoline vapors that contribute to the formation of ozone and to reduce the public's exposure to benzene, a toxic air contaminant. Air District staff also conduct regular inspections to check that systems are operating as certified.

CARB approved EVR regulations for GDFs equipped with underground storage tanks in March 2000, and for GDFs equipped with aboveground storage tanks (AST)¹ in June 2007. EVR regulations established new standards for vapor recovery systems to reduce emissions during storage and transfer of gasoline and to increase reliability of vapor recovery components. Phase-in of EVR standards² for GDFs equipped with ASTs began in 2009 and is still ongoing.

EVR standards were designed to force the development of emission control technologies that meet regulatory requirements. However, industry has developed only one Phase II EVR system that is certified by CARB for use at GDFs equipped with ASTs. That system is only compatible with a small subset of GDFs, and the subset has a wide range of annual gasoline throughputs. A recent survey of Air Districts indicates there are about 187 GDFs required by Air District rules to install vapor recovery systems but have not yet upgraded to Phase II EVR systems. Compliance with existing regulations would require all AST GDFs with the prerequisite configuration upgrade to Phase II EVR by March 13, 2019, regardless of annual gasoline throughput. Gasoline vapor emissions produced at AST GDFs are directly proportional to the amount of fuel the GDFs dispense.

The estimated cost to upgrade from pre-EVR Phase II to Phase II EVR is much higher than was estimated at the time of the EVR regulation adoption. Therefore, compliance with the Phase II EVR standards may place a disproportionate burden on AST GDF owners due to varying annual gasoline throughputs and high equipment replacement costs. The high costs of the upgrade would be borne by all of the applicable AST GDFs, regardless of their annual throughput and reactive organic gases and benzene emissions.

On April 23, 2015, the Board approved regulatory amendments that allowed the continued use of pre-EVR Phase I systems based upon U.S. Environmental Protection Agency Federal 8-HR Ozone Standards Attainment status, population density, and annual gasoline throughput, to allow for more cost-effective implementation of the AST

¹ An AST is a gasoline storage tank that is intended for permanent installations, is unburied and exposed to atmosphere, and can be located above or below grade.

² For GDFs equipped with ASTs, Phase II EVR means any system that complies with performance standards or specifications adopted by CARB in the *Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities Using Aboveground Storage Tanks* (CP-206). GDFs with Phase II systems not complying with CP-206 are defined as pre-EVR Phase II systems.

EVR regulations. The amendments allowed for certain ASTs below set annual throughput thresholds that are located in federal ozone non-attainment areas to continue to use their current pre-EVR Phase I systems unless they are replaced with Phase I EVR.³ The Phase II EVR requirements could not be addressed during the April 2015 hearing because the first system had only recently been certified and there was not enough time nor data for a cost-effectiveness analysis.

CARB staff has now proposed to make amendments to the vapor recovery definitions and certification procedure relating to Phase II vapor recovery for ASTs. The proposed amendments to the vapor recovery definitions and procedure would:

- Add terms and definitions to D-200 that are commonly utilized by CARB and Air District staff;
- Amend CP-206 to align the EVR requirements for Phase II with the Phase I EVR standards;
- Amend CP-206 for attainment areas, where existing ASTs required by state and Air District rules to have Phase II vapor recovery systems can continue to use pre-EVR Phase II systems until the end of useful life unless they are replaced by a Phase II EVR system. Existing AST GDFs located in attainment areas are exempt from Phase II EVR requirements if vapor recovery is not required by the local Air District; and
- Amend CP-206 for nonattainment areas, where existing AST GDFs required by state and Air District rules to have Phase II systems, and, with annual gasoline throughput of 480,000 gallons or less, can continue to use pre-EVR Phase II systems until the end of their useful life. At the end of a system's useful life, the GDF must upgrade to a Phase II EVR system.

CARB staff proposed no changes to the compliance requirements for new AST GDFs, nor for existing AST GDFs with an annual gasoline throughput greater than 480,000 gallons in nonattainment areas. These AST GDFs would continue to be required to upgrade to Phase II EVR systems by the upgrade deadline.

CARB staff evaluated the difference between emissions under existing EVR regulations and the amendments. The amendments would allow a slight delay in emission reduction benefits compared to the implementation of the existing EVR regulations, where 187 AST GDFs would have been required to upgrade to Phase II EVR by March 13, 2019. Under the amendments, about 161 AST GDFs would be allowed to maintain their pre-EVR Phase II equipment until the end of useful life instead of being required to meet the upgrade deadline. Initially, the amendments, as compared to the existing regulations, would see a short-term delay in the emission reduction benefits of the existing regulations. As pre-EVR Phase II systems on qualified AST GDFs reach the end of their useful life, they would be required to upgrade to Phase II EVR. CARB staff estimates that under the amendments, annual emission reductions would equal those of the existing regulations by 2024.

³ CP-206, Section 2.4.4, allows AST GDFs to maintain their pre-EVR Phase I equipment until the end of useful life in attainment areas, unless that system is replaced by a system that meets the performance standards or specifications of CP-206. The replacement may be voluntary or required by district rules.

The amendments would not lead to the creation of any new emissions and would not increase emissions compared to 2018 baseline levels. The amendments would require the AST GDFs with the highest throughput, and therefore the most emissions, to meet the existing compliance date of March 13, 2019. Of the approximately 187 AST GDFs that are currently required to upgrade to Phase II EVR by the deadline, about 26 GDFs have an annual gasoline throughput greater than 480,000 gallons/year. These 26 GDFs account for the majority (approximately 68 percent) of gasoline throughput and associated emissions from the 187 GDFs currently required to upgrade to Phase II EVR. Requiring all 187 AST GDFs to spend approximately \$36,000 each to upgrade to Phase II EVR by March 13, 2019, would result in only about 23 percent more emission reductions before 2024, when the annual emission reductions of the amendments are expected to equal that of the existing regulations.

Objectives and Benefits of the Proposed Regulatory Action:

The objective of the amendments is to safeguard public health benefits by ensuring the emission rates envisioned for the Phase II EVR standards would be met while accomplishing the following benefits:

- Add common terms with definitions agreed upon by CARB and Air District staff, which provides clarity for implementation and enforcement;
- Align the EVR requirements for Phase II with the Phase I EVR standards, which were amended in 2015 to include an annual gasoline throughput threshold to improve cost effectiveness;
- Improve cost effectiveness of the Phase II EVR standards by requiring only the 26 existing AST GDFs with greater annual gasoline throughputs, and therefore greater emissions, to upgrade their existing systems to Phase II EVR in 2019; and
- Provide owners of the 161 AST GDFs with smaller throughputs economic relief and additional time to upgrade to Phase II EVR by delaying their upgrade requirement until their current systems have reached the end of useful life.

CARB staff estimates that the amendments will preserve emission reductions where they are most needed while providing financial benefits in the form of net cost-savings of approximately \$1.3 million for about 50 businesses and 111 government agencies that own GDFs equipped with ASTs. The cost-savings are due to delays in the timing of Phase II EVR system installations and avoiding costs due to value lost when GDFs replace pre-EVR systems before the end of their useful life.

CARB staff's proposal was developed through a public process, with extensive input from local Air District staff, equipment distributors and installers, and equipment manufacturers. Staff informed, involved, and updated public stakeholders on staff's progress developing the amendments. In 2017 and 2018, CARB staff held two public workshops in Sacramento about study findings and CARB staff's early draft regulatory amendments. The workshops and informal pre-rulemaking discussions engaged interested parties and provided staff with useful information that they considered during

the development of the regulatory amendments. In addition, staff posted workshop materials to a public webpage and distributed announcements and workshop materials through the CARB list serves that, based on individual subscribers to the list serves, reach more than 4,000 individuals. Staff sent out multiple emails providing announcements to upcoming workshops, a description of the proposed amendments, and contact information for relevant staff.

Description of Regulatory Action:

On June 4, 2019, CARB released the Notice of Public Hearing (45-Day Notice) and Staff Report: Initial Statement of Reasons for Rulemaking (Staff Report) entitled “Public Hearing to Consider Proposed Amendments to Certification Procedures for Vapor Recovery Systems for Aboveground Storage Tanks at Gasoline Dispensing Facilities”, for public review. The Staff Report contains a description of the rationale for the amendments. On June 7, 2019, all references relied upon and identified in the Staff Report were made available to the public. CARB received no written comments during the 45-Day Notice comment period.

On July 25, 2019, CARB conducted a public hearing. No written comments and only one oral comment in support of the proposed amendments were presented by any individuals or organizations during the hearing. At the conclusion of the hearing, the Board approved Resolution 19-18 for adoption of the proposed amendments to CARB’s existing vapor recovery regulations without modifications.

In accordance with Government Code section 11346.8, the Board directed the Executive Officer to adopt the proposed amendments after making any appropriate conforming modifications, as well as any additional supporting documents and information, available to the public for a period of at least 15 days (15-Day Notice). The staff proposal was the same as that described in the Staff Report released on June 7, 2019, and no response was necessary for the only public comment received during the public hearing; therefore no 15-Day Notice was necessary for the proposed amendments.

Comparable Federal Regulations:

There are no federal regulations or programs directly comparable to California’s EVR program for ASTs. California’s existing EVR regulations already exceed federal requirements. Other states and countries often require the installation of vapor recovery systems certified by CARB. Thus, changes to CARB EVR certification requirements may have a national and international impact.

An Evaluation of Inconsistency or Incompatibility with Existing State Regulations (Gov. Code § 11346.5, subd. (a)(3)(D)):

During the process of developing the proposed regulatory action, CARB staff conducted a search of any similar regulations on this topic and concluded these regulations are neither inconsistent nor incompatible with existing state regulations.