

TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER THE PROPOSED AMENDMENTS TO CALIFORNIA SPECIFICATIONS FOR FILL PIPES AND OPENINGS OF MOTOR VEHICLE FUEL TANKS

The California Air Resources Board (CARB or Board) will conduct a public hearing at the time and place noted below to consider approving for adoption the proposed amendments to California Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks.

DATE: October 25, 2018

TIME: 9:00 A.M.

LOCATION: California Environmental Protection Agency
California Air Resources Board
Byron Sher Auditorium
1001 I Street
Sacramento, California 95814

This item will be considered at a meeting of the Board, which will commence at 9:00 a.m., October 25, 2018, and may continue at 8:30 a.m., on October 26, 2018. Please consult the agenda for the hearing, which will be available at least ten days before October 25, 2018, to determine the day on which this item will be considered.

WRITTEN COMMENT PERIOD AND SUBMITTAL OF COMMENTS

Interested members of the public may present comments orally or in writing at the hearing and may provide comments by postal mail or by electronic submittal before the hearing. The public comment period for this regulatory action will begin on September 7, 2018. Written comments not physically submitted at the hearing must be submitted on or after September 7, 2018, and received **no later than 5:00 p.m. on October 22, 2018**. CARB requests that when possible, written and email statements be filed at least ten days before the hearing to give CARB staff and Board members additional time to consider each comment. The Board also encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action. Comments submitted in advance of the hearing must be addressed to one of the following:

Postal mail: Clerk of the Board, California Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

Additionally, the Board requests but does not require that persons who submit written comments to the Board reference the title of the proposal in their comments to facilitate review.

AUTHORITY AND REFERENCE

This regulatory action is proposed under the authority granted in California Health and Safety Code, section 41954. This action is proposed to implement, interpret, and make specific sections 41954(a).

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW (GOV. CODE, § 11346.5, subd. (a)(3))

Sections Affected: Proposed amendments to *Specifications for Fill Pipes and Openings of 2015 and Subsequent Model Motor Vehicle Fuel Tanks*, last amended: [INSERT DATE OF AMENDMENT], which is incorporated by reference in the California Code of Regulations, Title 13, section 2235.

Background and Effect of the Proposed Regulatory Action:

CARB staff is proposing amendments to the Fill Pipes Specifications to help ensure new motor vehicle fill pipes continue to be compatible and form a good seal with Phase II recovery nozzles that are certified for use at California gasoline stations, therefore reducing overpressure. The original Fill Pipe specifications were adopted in 1976, which primarily defined acceptable dimensions for interfacing with vapor recovery nozzles. Subsequent changes were made to introduce performance specifications to better ensure problem-free refueling. The new amendments propose adding a new performance leak standard and a bench test procedure. Minimizing leaks between the motor vehicle fill pipe and nozzle helps ensure On-board Refueling Vapor Recovery (ORVR) equipped vehicles are identified during refueling. This identification is necessary to reduce air ingestion at the nozzle, which helps reduce pressure-driven emissions caused by evaporation of gasoline within the gasoline storage tank during winter months.

Since the Fill Pipe specifications were first adopted, there have been changes to both vehicles and the nozzles over time. Newer vehicles capture vapor from refueling by having an ORVR system. This was phased in for new light-duty vehicles between 1998

and 2006. In addition, CARB implemented Phase II Enhanced Vapor Recovery (EVR) systems at gasoline stations starting in 2001 for underground storage tanks (UST), and 2009 for above-ground storage tanks (AST). These actions, done separately by the Board, would reduce emissions from the vehicle side by adopting ORVR systems, and for those vehicles without ORVR, Phase II systems would capture and contain gasoline emissions. The Phase II EVR systems are certified to capture and contain at least 95 percent of available vapor generated during refueling.

The performance leak standard will quantify an allowable leak rate between the fill pipe face and the nozzle boot. This is necessary as new capless fill pipe designs continue to be introduced by multiple manufacturers in California. Though a zero leak rate would be ideal, it would be hard to achieve with some of the designs available on the market today. A performance leak standard gives manufacturers flexibility in the design they choose to meet the standard. This proposal specifies a leak standard being phased in starting in the 2022 model year and being fully phased in 2024 model year and establishes a bench test procedure to measure the leak rate. Staff developed the bench leak test procedure by working with the vehicle and nozzle manufacturers.

In addition, to prevent future increases in overpressure at California gasoline stations, this proposal modifies existing fill pipe dimensional requirements. These design changes only apply when an auto manufacturer is changing the fill pipe head design on new model year 2024 and subsequent vehicles. From talks with manufacturers, staff understands that the fill pipe heads designs do not change often. Some designs have been around for decades. This provides flexibility, since the cost of redesigning and testing the fill pipe would already be incurred by the manufacturer during a planned redesign.

Objectives and Benefits of the Proposed Regulatory Action:

The proposed amendments are for new performance leak standard for fill pipes in new vehicles. The amendments are needed to improve motor vehicle fill pipe compatibility with nozzles. This compatibility is necessary to reduce air ingestion at the nozzle, which will help reduce pressure driven emissions (overpressure emissions) caused by evaporation of gasoline within the gasoline dispensing facility (GDF) storage tank headspace. Unexpected pressure driven emissions cause GDF vapor recovery systems to not achieve the performance standards and emission reductions anticipated when EVR regulations were adopted.

The fill pipe amendments will reduce misidentification rates with ORVR vehicles and ensure compatibility with newer EVR and Enhanced Conventional (ECO) nozzle spout. Emission reductions will result from minimizing air ingestion by vented fill pipe designs by enabling a better seal between the fill pipe of a vehicle with an ORVR system and the nozzle's vapor collection bellows. Approximately 52 percent of California GDFs are equipped with the vacuum assist system.

CARB staff estimates that compliance with the proposed amendments will improve air quality by reducing gasoline vapor (aka reactive organic gases, or ROG) emissions, which also contain benzene, by about 0.63 tons per day during winter months (typically November through February) on a day with average vapor concentration. The proposed fill pipe amendments and the proposed nozzle amendments are expected to yield emission reductions up to 2.2 tons per day (TPD) in 2030 on a day with maximum vapor concentration. The proposed amendments are projected to reach the maximum potential emissions reductions that can result from improving the fill pipe and nozzle interface due to the mechanics of gas station overpressure emissions. Therefore, further fill pipe improvements are not expected to yield additional reductions in emissions.

Reducing ROG emissions is an integral part of California reaching its goal of attaining federal ozone standards. Reducing benzene emissions is critical for protecting the health of people who live and work near gasoline dispensing facilities and people who own and fuel ORVR equipped vehicles with fill pipes that do not form a good seal with the nozzle. Fill pipes that meet the performance leaks standard and future dimensional requirements will also enable the automotive industry to more effectively design compatible fill pipes for future vehicle models. In addition, reducing overpressure conditions will reduce the frequency of GDF In-Station Diagnostic (ISD) system overpressure alarms, which will reduce the frequency and cost of service calls for many GDFs with vacuum-assist vapor recovery systems.

CARB staff's proposal was developed in conjunction with an extensive public process. Staff informed, involved, and updated public stakeholders on staff's progress developing the proposed amendments. Staff held public workshops and had other meetings with interested persons during the development of the proposed regulatory amendments. These informal pre-rulemaking discussions provided staff with useful information that they considered during development of the regulatory amendments that are now being proposed for formal public comment. Between 2012 and 2017, CARB staff held eleven public workshops in northern and southern California about GDF storage tank overpressure problems, study designs and results, and potential solutions. These workshops engaged representatives from nozzle, fill pipe, and automotive manufacturers; GDF owners and operators; service contractors and consultants; petroleum refineries and distributors; air districts; Tribes; environmental consultants; farm bureaus; and air quality agencies from outside of California. In addition, staff created a public webpage where related workshop materials and technical support documents were posted to keep stakeholders up to date on the latest developments in the pre-rulemaking process 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 for both the fill pipe and nozzle proposed amendments.

Further, over the last two years, CARB staff participated in over a dozen meetings with the Society of Automotive Engineers (SAE) Fuel Systems J285/J1140 Task Force (SAE Task Force), which is comprised of nozzle, vehicle, and fill pipe manufacturers. The SAE Task Force is charged with developing and testing new dimension specifications to standardize the vapor recovery nozzle and fill-pipe interface to improve compatibility. The nozzle dimensions included in CARB staff's proposed amendments are the result of extensive deliberations of nozzle, vehicle, and fill pipe manufacturers who participated in the SAE Task Force. All the proposed dimensions have a range of values, rather than a single value, to increase flexibility for nozzle manufacturers while at the same time providing the constraint needed for the fill pipe manufacturers.

A detailed explanation on benefits to the protection of public health and safety, worker safety, and the environment can be found on page 6 of this Notice.

Comparable Federal Regulations:

There are no federal regulations or programs directly comparable to California Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks. California's existing Fill Pipe Specifications already exceed federal requirements.

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 conducted a search of any similar regulations on this topic and concluded these regulations are neither inconsistent nor incompatible with existing state regulations.

DISCLOSURE REGARDING THE PROPOSED REGULATION

The determinations of the Board's Executive Officer concerning the costs or savings incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulatory action are presented below.

Fiscal Impact/Local Mandate Determination Regarding the Proposed Action (Gov. Code, § 11346.5, subds. (a)(5)&(6)):

Under Government Code sections 11346.5, subdivision (a)(5), and 11346.5, subdivision (a)(6), the Executive Officer has determined that the proposed regulatory action will create minor costs to a State agency, but will not affect federal funding to the State. The new modified fill pipe reports may require additional time for CARB staff to review. This additional work load is anticipated to be absorbable and can be carried out by the

current staff. The proposed action will not affect costs to or mandate any local agency or school district, whether or not reimbursable by the State under Government Code, title 2, division 4, part 7 (commencing with section 17500), and will not result in other nondiscretionary cost or savings to State or local agencies.

Housing Costs (Gov. Code, § 11346.5, subd. (a)(12)):

The Executive Officer has also made the initial determination that the proposed regulatory action will not have a significant effect on housing costs.

Significant Statewide Adverse Economic Impact Directly Affecting Business, Including Ability to Compete (Gov. Code, §§ 11346.3, subd. (a), 11346.5, subd. (a)(7), 11346.5, subd. (a)(8)):

The Executive Officer has made an initial determination 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.

Results of the Economic Impact Analysis/Assessment (Gov. Code, § 11346.5, subd. (a)(10)):

A detailed assessment of the economic impacts of the proposed regulatory action can be found in Chapter VIII of the Initial Statement of Reasons (ISOR).

NON-MAJOR REGULATION: Statement of the Results of the Economic Impact Assessment (EIA):

Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

The objective of the proposed regulatory action is to minimize air leakage in vented fill pipes. CARB staff estimates that compliance with the proposed amendments will result in a reduction of ROG emissions, which also contain benzene, by about 0.63 tons per day during winter months using average vapor concentration. Reducing ROG emissions will benefit the health and welfare of California residents by reducing ambient ground level ozone and benzene exposure. Although the regulation will not directly affect worker safety, workers at GDFs with assist vapor recovery systems may experience reduced occupational exposure to benzene after the improved fill pipes enter the fleet. Reducing ambient ground level ozone also helps to reduce smog, which is a benefit for the state's environment.

Effect on Jobs/Businesses:

The Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the Economic Impact Assessment in the ISOR.

Benefits of the Proposed Regulation:

The objective of the proposed regulatory action is to minimize air leakage from vented fill pipes by requiring a performance leak standard, which would ensure excess air is not ingested by the vapor recovery nozzle and thus reduce gasoline vapor emissions. In addition, to prevent future increases in overpressure at California gasoline stations, this proposal modifies existing fill pipe dimensional requirements, applying when an auto manufacturer is changing a fill pipe design.

A summary of these benefits is provided in this Notice. Please refer to “Objectives and Benefits” section, under the Informative Digest of Proposed Action and Policy Statement Overview on page 2.

Business Report (Gov. Code, §§ 11346.5, subd. (a)(11); 11346.3, subd. (d)):

In accordance with Government Code sections 11346.5, subdivisions (a)(11) and 11346.3, subdivision (d), the Executive Officer finds the reporting requirements of the proposed regulatory action which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Cost Impacts on Representative Private Persons or Businesses (Gov. Code, § 11346.5, subd. (a)(9)):

In developing this regulatory proposal, CARB staff evaluated the potential economic impacts on representative private persons or businesses. CARB staff is not aware of any cost impacts that a representative private person would necessarily incur in reasonable compliance with the proposed action.

Staff expects negligible cost to industry, since the proposed performance leak standard and bench leak test uses equipment that auto manufacturers and fill pipe suppliers typically have on hand, and the test is relatively simple and is not time intensive to perform. Also, the bench leak test is a straightforward and standard method for manufacturers to gauge if fill pipes are designed with minimal leak size in order to not adversely impact overpressure at gas stations using the assist style nozzle. Industry had previously asked CARB for guidance in the form of a test verifying fill pipe leak performance. Therefore staff expects this proposed test will save industry time and hassle by providing a straightforward and standard verification method.

Direct costs related to the proposed amendments can be broken down for testing into two categories: equipment and testing personnel. Additionally staff estimates a cost for reporting during certification. CARB staff anticipates the lifetime of the proposed regulatory amendments to be three years, from 2022 through 2024 when the regulation is fully implemented. The total cost over 3 years of implementing this regulation is \$174,500 to the auto industry and suppliers. Since fill pipe designs do not change much over time, the testing data can be carried over to future model years. Additional testing would only be required when there are new fill pipe designs.

The proposal for dimensional changes to the current fill pipe specification are limited to cases where a manufacturer is already changing a fill pipe design. It is assumed the cost of redesigning and testing the fill pipe would already be incurred by the manufacturer during a planned redesign and there are no additional costs as a result of the proposed amendments.

Effect on Small Business (Cal. Code Regs., tit. 1, § 4, subds. (a) and (b)):

Staff expects the direct cost to a small business would be about \$5,000 for initial equipment costs plus annual ongoing cost of around \$500, including \$253 for bench testing and \$250 for reporting cost for three years.

Consideration of Alternatives (Gov. Code, § 11346.5, subd. (a)(13)):

Before taking final action on the proposed regulatory action, the Board must determine 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, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law. CARB staff considered reasonable alternatives to the proposed amendments, as described in Chapter IX of the ISOR.

ENVIRONMENTAL ANALYSIS

CARB, as the lead agency under the California Environmental Quality Act (CEQA), has reviewed the proposed regulatory amendments and concluded that the proposed action is exempt pursuant to CEQA Guidelines §15308, as this is an action taken by a regulatory agency for the protection of the environment. A brief explanation of the basis for reaching this conclusion is included in Chapter VII of the ISOR.

SPECIAL ACCOMMODATION REQUEST

Consistent with California Government Code Section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language; and
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 business days before the scheduled Board hearing.

TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia;
- Documentos disponibles en un formato alternativo u otro idioma; y
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

AGENCY CONTACT PERSONS

Inquiries concerning the substance of the proposed regulatory action may be directed to the agency representative, Jason Gordon, Air Resources Engineer, Advanced Clean Cars Regulations Section, at (626) 575-7068 or (designated back-up contact) Shobna Sahni, Manager, Advanced Clean Cars Regulations Section, at (626) 450-6104.

AVAILABILITY OF DOCUMENTS

CARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: *Staff Report: Initial*

Statement of Reasons - Public Hearing to Consider the Proposed Amendments to California Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks.

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikeout format to allow for comparison with the existing regulations, may be accessed on CARB's website listed below, or may be obtained from the Public Information Office, California Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, on September 4, 2018.

Further, the agency representative to whom nonsubstantive inquiries concerning the proposed administrative action may be directed is Bradley Bechtold, Regulations Coordinator, (916) 322-6533. CARB staff has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Government Code, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340).

Following the public hearing, the Board may take action to approve for adoption the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also approve for adoption the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice and that the regulatory language as modified could result from the proposed regulatory action. If this occurs, the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15-days before final adoption.

The public may request a copy of the modified regulatory text from CARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814.

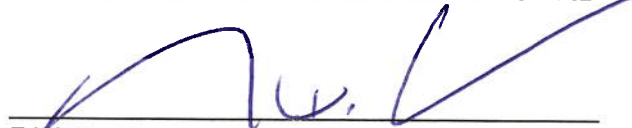
FINAL STATEMENT OF REASONS AVAILABILITY

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this Notice, or may be accessed on CARB's website listed below.

INTERNET ACCESS

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on CARB's website for this rulemaking at <http://www.arb.ca.gov/regact/2018/fillpipe2018/fillpipe2018.htm>

CALIFORNIA AIR RESOURCES BOARD



Richard W. Corey
Executive Officer

Date: August 21, 2018

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.arb.ca.gov.