

State of California  
AIR RESOURCES BOARD

**Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information**

2012 AMENDMENTS TO THE CLEAN FUELS OUTLET REGULATION

Public Hearing Date: January 26 and 27, 2012

Public Availability Date: February 22, 2012

Deadline for Public Comment: March 8, 2012

At its January 26 and 27, 2012 public hearing, the Air Resources Board (ARB or Board) approved staff's proposed amendments with modifications to the California Code of Regulations (CCR), title 13, sections 2300, 2302, 2303, 2303.5, 2304, 2307, 2308, 2309, 2311, 2311.5, 2313, 2314, 2315, 2316 and 2318; the repeal of sections 2306, 2310, 2312 and 2317; and the adoption of section 2306.1. These regulations relate to the Board's Clean Fuels Outlet (CFO) program which requires the construction of alternative fueling infrastructure to support auto manufacturers' development and commercialization of zero emission vehicles.

At the hearing, the staff presented, and the Board approved modifications to the regulations originally proposed in the staff report released on December 7, 2011, in response to comments received since the staff report was published. These modifications include an option to suspend the outlet requirements for hydrogen if activities detailed in a Memorandum of Agreement (MOA) are successfully implemented and sunset the outlet requirements for hydrogen if activities undertaken pursuant to the MOA result in at least 100 publically accessible hydrogen outlets. The modifications also add a provision to revise the required number of outlets based on updated auto manufacturer's alternative fuel vehicle projections. Additional modifications include corrections of minor typographical errors and clarifications.

Board Resolution 12-11 approved staffs proposed modifications, additions and deletions. The resolution and all other regulatory documents for this rulemaking are available online at the following ARB website:

<http://www.arb.ca.gov/regact/2012/cfo2012/cfo2012.htm>

In accordance with the Government Code, Section 11346.8, the Board directed the Executive Officer to adopt in the CCR, title 13, Sections 2300 through 2318, after making them available to the public for comment for a period of at least fifteen days. The Board further provided that the Executive Officer shall consider such written comments as 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.

## **Modified Text Being Made Available for Public Comment**

As shown in the 45-day public notice, the existing regulatory language is denoted by plain text, while additions to the existing regulatory text, as initially proposed, are denoted by single underline and deletions by ~~single-strikeout~~. Attachment A contains the 15-day modifications to sections 2300, 2302, 2303, 2303.5, 2304, 2306.1, 2307, 2308, 2309, 2311, 2311.5, 2312, 2313, 2314, 2315 and 2318, in which additions are indicated by double underline and deletions by ~~double-strikeout~~.

## **Summary of Proposed Modifications**

### **1. Memorandum of Agreement (MOA)**

Staff's modifications, which were presented at the hearing, include the addition of paragraph 2304(a)(2)(C)3 that introduces an MOA that, if executed and fully implemented, suspends the clean fuel outlet regulatory requirements for hydrogen outlets. A qualifying MOA would be signed by refiners and importers of gasoline (or an authorized industry representative), automobile manufacturers, and relevant environmental organizations, and must ultimately result in 100 operating retail hydrogen fueling outlets that meet the performance criteria specified in Sections 2302 and 2309. While the actual MOA language is not included in staff's proposed modifications, proposed paragraph 2304(a)(2)(C)3 sets forth the necessary elements of a qualifying MOA – including a timeline for achieving important milestones such as securing funding and building the hydrogen outlets. Failure to achieve any key milestone would result in a notice to the signers of the MOA to meet that milestone or otherwise remedy the situation in thirty days or less. In the event that no remedy is achieved, the signers of the MOA, the regulated refiners/importers, as well as the public shall be notified that the MOA is no longer in effect. Additionally, the major refiner/importer will be notified of their required minimum number of hydrogen clean fuel outlets at that time.

Staff is also proposing to amend Section 2318 to include a clause that would effectively sunset the CFO regulation for hydrogen if all of the terms of the MOA discussed above are met and there are at least 100 publically accessible hydrogen outlets that meet the performance standards specified in Sections 2302 and 2309.

Development of the MOA was underway during the rule modification process and introduced as an alternative to the CFO regulation in the staff report. When the staff report was released on December 7, 2011, negotiations on the MOA had not advanced to the point where staff could remain confident that hydrogen infrastructure would develop at a pace to support projected growing numbers of fuel cell vehicles without the CFO regulation. Rather than withdrawing the CFO regulation as suggested by the Western States Petroleum Association and the California Independent Oil Marketers Association, staff opted to incorporate the potential of a qualifying MOA into the CFO regulation via the proposed modifications to Sections 2304 and 2318. If fully executed

and successful, the MOA would have the same effect regardless if it is incorporated into the CFO regulation or is a stand-alone agreement. Without the CFO regulation, however, there would be no way to ensure that hydrogen infrastructure continues to develop if the terms of the MOA are not met.

## **2. Adjusting Required Number of Outlets based on Updated Automaker Projections**

At the hearing, staff also proposed the addition of paragraphs 2304(a)(2)(F) and 2307(f) that require the Executive Officer to adjust the final number of clean fuel outlets for a particular compliance year if deemed necessary based on more recent automaker alternative fuel vehicle projections. With staff's original proposal, clean fuel outlets would be required to be completed thirty three months after the board receives automakers' annual projections indicating that the trigger has been reached. Because staff's original proposal provides nine additional months for building outlets and, consequently, includes an additional automaker survey between the time that regulated parties are first notified and when their outlets must be built, the Executive Officer will have the time and information needed to appropriately adjust the required number of outlets. Proposed paragraph 2307(f) requires the Executive Officer to notify affected regulated parties of any such adjustments nineteen months before their outlets are to be built and operational. This addition makes it necessary to modify paragraph 2309(a)(3) requiring refiner/importers to notify the Executive Officer of their final outlet locations eighteen months before the start of the compliance year instead of nineteen. This would be the final adjustment to the required number of outlets for a given compliance year. It is important to note, however, that the total required number of outlets is calculated and updated every year. Should the total number of projected vehicles for a given compliance year decrease, that decrease will be reflected in the calculations determining the required number of new CFOs in subsequent compliance years.

## **10. Minor Modifications**

Other post-hearing conforming modifications were made to the regulation for clarification and simplification:

### Minor modifications to test procedures that are incorporated by reference:

"California exhaust emission standards and test procedures for 2001 and subsequent model passenger cars, light-duty trucks, and medium-duty vehicles" was inadvertently deleted from Sections 2303(a) as the authority cited that requires auto manufacturers to report alternative fuel vehicle production estimates. The test procedure referenced in staff's initial proposal would apply to reporting requirements for model years 2015 and beyond. Therefore, staff is proposing to reinstate the older test procedure to Section 2303 to ensure that auto manufacturers also include model years 2012, 2013 and 2014 in their projections. Similarly, reference to "California 2015 and subsequent model criteria pollutant exhaust emission standards and test procedures and 2017 and subsequent model greenhouse gas exhaust emission standards and test procedures for

passenger cars, light-duty trucks and medium-duty vehicles," was not added to Sections 2303(b), 2303(c) and 2315(d) in staff's original proposal by mistake. These changes reflect the need to reference both test procedures as the authority and an information source for estimating alternative fuel vehicle populations.

Minor modifications are being proposed to Section H.3.2 of both the "California exhaust emission standards and test procedures for 2001 and subsequent model passenger cars, light-duty trucks, and medium-duty vehicles," and the "California 2015 and subsequent model criteria pollutant exhaust emission standards and test procedures and 2017 and subsequent model greenhouse gas exhaust emission standards and test procedures for passenger cars, light-duty trucks and medium-duty vehicles," to include vehicle pressure rating in the reporting requirements for vehicles that use hydrogen fuel. This information is being requested to address a concern raised about the apparent lack of consensus among auto manufacturers on appropriate fueling pressure for hydrogen fuel cell vehicles. As a result, it will enable ARB to advise regulated parties on what to expect in terms of customers' fueling requirements.

Minor modifications are also being proposed to Section H.3.2 of the "California exhaust emission standards and test procedures for 2001 and subsequent model passenger cars, light-duty trucks, and medium-duty vehicles" that include adding a requirement that would apply only to vehicles that use hydrogen fuel and only in calendar year 2012. With this proposed change, automakers would be required to report projections for hydrogen fueled vehicles 29 months prior to January 1 of the model year for which the vehicles are certified (i.e. report projections for model years 2012, 2013, 2015 and 2015 by August 1, 2012). The purpose of this addition is to ensure that ARB is able to collect fuel cell vehicle projection data that can be used to make decisions for requiring hydrogen stations in 2015, if necessary.

#### Minor modifications for Section 2300: Definitions

(3) "Compliance year." To capture automakers 2012 projections for hydrogen fueled vehicles that would be used to make trigger determinations for 2015, staff is proposing to add a definition for compliance year that would apply to 2015 only – the 12 month period from May 1, 2015, through April 30, 2016. This modification helps to ensure that regulated parties have adequate time to build hydrogen stations in 2015, should the data indicate they are necessary.

To ensure that this modification is captured in the timeline integrated into the various actions and requirements of the regulation, the word "year" was replaced with "compliance year" wherever appropriate.

(14) "Importer." In response to comments received on the staff report that the definition for importer should be consistent with existing fuels regulations. Originally, staff used the definition for importer from the low carbon fuel standard regulation. That definition had since been changed so that it applied to the owner of the product when it is *delivered* at the import facility, rather than *received*. Consequently, staff is proposing to

use the importer definition from the CaRFG (i.e. “any person who first accepts delivery of gasoline in California”) as it better captures the intent of staff’s regulatory proposal.

Modification to Section 2302(b)(1):

This provision establishes requirements for gaseous fuel dispensers in terms of tanks designed to be filled at two different pressures. Staff is proposing to remove the tank-pressure-specific requirements, and replace them with the requirement that dispensing equipment must be able to fill on-board vehicle storage tanks within a specified period of time. Along with aligning this requirement with the most current thinking in hydrogen fueling technology, this modification leaves open the possibility for more standardization in the field of hydrogen fueling by not specifying fueling tank pressures in this regulation.

Modifications to Section 2303(b):

This section establishes how the number of designated clean fuel vehicles is estimated for a given compliance year for the trigger calculations. To account for the estimates made in summer of 2012 for the 2015 compliance year, staff is proposing the following additions: in paragraph [ii], include one-sixth model of the model year 2012 vehicle projections in the equation; and to paragraph [iii], include Department of Motor Vehicle registration data through August 31, 2012.

Minor modification to Section 2307(d):

This paragraph establishes the total minimum number of required CFOs for each regulated party. Staff has made modifications to make it easier for the reader to understand.

Minor modification to Section 2308(a):

The phrase “which is not a retail gasoline outlet” was removed from the first sentence of this requirement to convey that clean fuel outlets can be constructively allocated regardless if they are a stand-alone outlet or part of a gasoline outlet.

Minor modification to Section 2309(b)(2):

In response to a comment regarding the requirement to store a commercially reasonable quantity of fuel, staff is proposing to modify this requirement so that it simply requires the regulated party to ensure that fuel is available without requiring that they store it at the outlet.

Minor modifications to Section 2311 – relief from liability caused by breakdowns:

Comments received on the proposed regulation indicated that it is burdensome and onerous for a station operator to notify the executive officer of a minor or major breakdown within four hours. Staff agrees and is proposing modifications that would require reporting breakdowns within twenty four hours. Staff is also changed the amount of time for reporting that repairs have been completed from twelve to twenty four hours.

Additionally, the commenter recommended that staff not change the amount of time to complete the repair following a major breakdown from six to one month, as proposed in Section 2311(b)(2)(B). Their rationale – repairs could be delayed since hydrogen dispensing technology is new with a limited vendor base. While this is true today, by 2015 or later, the vendor base and supply of spare parts will be greater due to the increased numbers and standardization of hydrogen stations. Therefore, after consulting with hydrogen station developers, staff believes that two months is a reasonable amount of time to complete repairs following a major breakdown, and is proposing to modify this section accordingly. In addition, because Section 2311 pertains to relief from liability due to breakdowns, it is important to note that there are clauses in the penalty statutes cited in Section 2315 that would preclude a regulated party from being penalized if they are acting in good faith or are not able to complete a repair due to circumstances beyond their control.

#### Deletion of Section 2312:

Staff is proposing to delete this section. Since the regulated party has been changed to refiner/importers, it is no longer necessary to require regulated parties to report the total number of gasoline outlets that they own, lease or are otherwise affiliated with.

#### Minor modification to Section 2315(d):

Staff is recommending clarifying language to this penalty provision that better describes under what circumstances an auto manufacturer could be found in violation of Health and Safety Code Section 42402.4.

In addition, minor grammatical or clarification modifications were made to the following Sections: 2300(a)(26), 2304 (introductory paragraph), 2307(a), 2308(g) and (h), 2309(b)(6), 2309(e), and 2313.

#### **Additional Document(s) Added to the Record**

1. “Corporate bond data” contains a compilation of different corporate bond interest rates for the seven major petroleum companies.
2. “DOE - 2012 - H2A Analysis”, “DOE - 2012 - H2A Production Analysis”, and “DOE - 2012 - H2A Production Case Studies” are pdfs of the US Department of Energy’s H2A web-based model for conducting financial analyses of hydrogen infrastructure. This model can be accessed at:  
[http://www.hydrogen.energy.gov/h2a\\_analysis.html](http://www.hydrogen.energy.gov/h2a_analysis.html)
3. “EIN - 2012 H2 StationCashFlow\_WhitePaper\_Draft” and “EIN - 2012 - H2 Station Cash Flow Build-out Scenarios” are an analysis for supporting hydrogen infrastructure and supporting Excel-based model prepared by Energy Independence Now to evaluate hydrogen stations build-out scenarios as part of the efforts underway to develop the Memorandum of Agreement discussed herein.

4. "Fall-2011 CARB-CEC VehicleSurveySummary" is a compilation of auto manufacturer survey results from the most recent survey conducted by the California Energy Commission and Air Resources Board in the Fall of 2011.
5. "McKinsey\_Power\_trains\_for\_Europe" and "Edmonds - AutoObserver\_Summary on McKinsey Europe study FCV&BEV" include an evaluation of ZEV technologies and retail hydrogen infrastructure.

Written comments will only be accepted on the modifications identified in this notice and additional documents and information noticed herein and may be submitted by postal mail or electronic mail submittal as follows:

Postal mail: Clerk of the Board, 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.

In order to be considered by the Executive Officer, comments must be directed to ARB in one of the two forms described above and received by ARB by 5:00 p.m., on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alternativo u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

## Attachments

*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 ARB's website at [www.arb.ca.gov](http://www.arb.ca.gov).*