

State of California
AIR RESOURCES BOARD

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

PUBLIC HEARING TO CONSIDER THE 2011 AMENDMENTS TO THE
PHASE 3 CALIFORNIA REFORMULATED GASOLINE REGULATIONS

Public Hearing Date: October 21, 2011
Agenda Item No.: 11-8-5

I. GENERAL

The Staff Report: Initial Statement of Reasons for Rulemaking (Staff Report), entitled "Proposed 2011 Amendments to Phase 3 California Reformulated Gasoline Regulations," released August 31, 2011, is incorporated by reference herein. The Staff Report contained a description of the rationale for the proposed amendments. On August 31, 2011, all references relied upon and identified in the Staff Report were made available to the public.

A. Description of Board Action

On October 21, 2011, the Air Resources Board (ARB/Board) held a public hearing to consider the repeal of section 2258; and proposed amendments with modifications to sections 2260, 2261, 2264, 2265 (and the incorporated "California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model" as last amended August 7, 2008), 2265.1, 2266, 2266.5, and 2271 of title 13, California Code of Regulations (CCR). The amendments relate to the California reformulated gasoline (CaRFG) regulations, and would: (1) preserve the emissions benefits of the Phase 2 CaRFG standards by correcting errors of coefficients in the Predictive Model; (2) repeal an outdated provision relating to the oxygen content of gasoline during the wintertime for gasoline sold or supplied between November 1, 1992, and February 29, 1996; (3) require gasoline with a Reid vapor pressure (RVP) value equal to or less than 7.20 pounds per square inch (psi) (or, correspondingly, an RVP value equal to or less than 5.99 psi for a final blend of California Reformulated Blendstock for Oxygenate Blending (CARBOB)), be certified as an RVP-controlled gasoline, in order to ensure that summertime gasoline produced early would meet all the requirements for summertime gasoline; (4) ensure that any producer or importer intending to sell, offer, or supply a final blend of test-certified alternative gasoline formulation shall notify the Executive Officer sufficiently in advance to allow ARB inspectors an opportunity to sample and test the gasoline; (5) clarify that no person may combine any CARBOB that has been supplied from the facility at which it was produced or imported with anything other than what is specifically listed in the regulation; (6) amend the definition of racing vehicle to add clarity and more closely align with the U.S. Environmental Protection Agency's definition; and (7) include other miscellaneous changes to improve consistency, flexibility, and enforceability.

At the hearing, the staff presented, and the Board approved, additional modifications to the regulations proposed in the original Staff Report. Staff developed the modifications in response to comments received subsequent to the release of the Staff Report. After considering the staff's proposal, the Board adopted Resolution 11-36. The Board also directed staff to incorporate the approved modifications into the proposed regulatory text, with such other conforming modifications as may be appropriate.

B. Modifications to Original Proposal

1. Availability of Modified Text

In response to comments received during the 45-day comment period, at the hearing, staff presented suggested conceptual modifications to the restrictions on blending CARBOB with other materials to add: (a) a provision to allow for a mixing of a CARBOB tender with a non-CARBOB tender at the interface in a pipeline to allow for fuel pipeline transportation; (b) a provision to allow for the changeover of a storage tank in a terminal or bulk plant from a CARBOB to a non-CARBOB material, or vice versa; (c) a provision to allow for the changing of a compartment in a cargo tank truck, marine vessel, rail car, or other vessel from a CARBOB to a non-CARBOB material, or vice versa; and (d) a provision to allow for a protocol for the incidental mixing of non-CARBOB material with CARBOB during the normal and correct operation of a business.

The modified text, with changes to the originally published text clearly indicated, and all other documentation relied upon in the regulatory action were made available for a supplemental 15-day comment period starting on May 15, 2012, and ending on May 30, 2012, by issuance of a "Notice of Public Availability of Modified Text" (1st 15-Day Change Notice). The 1st 15-Day Change Notice and the document entitled "15-Day Modifications to the Original Proposal: MODIFICATIONS TO THE PROPOSED 2011 AMENDMENTS TO THE CALIFORNIA PHASE 3 REFORMULATED GASOLINE REGULATIONS" were posted on the ARB's internet site for the rulemaking on May 15, 2012. An email message announcing and linking to this posting was transmitted to more than 4,000 parties who have subscribed to the ARB's "fuels-general" listserve for notification of postings pertaining to motor vehicle fuels. The comment period ended on May 30, 2012. One submission of comments was received during the first 15-day comment period recommending additional changes.

The additional modified text, with additional changes clearly indicated, and all other documentation relied upon in the regulatory action were made available for a second 15-day comment period starting on June 14, 2012, and ending on June 29, 2012, by issuance of a "Second Notice of Public Availability of Modified Text" (2nd 15-Day Change Notice). The 2nd 15-Day Change Notice and the document entitled "Second 15-Day Modifications to the Original Proposal: MODIFICATIONS TO THE PROPOSED 2011 AMENDMENTS TO THE CALIFORNIA PHASE 3 REFORMULATED GASOLINE REGULATIONS" were posted on the ARB's internet site for the rulemaking on June 14, 2012. An email message announcing and linking

to this posting was transmitted to more than 4,000 parties who have subscribed to ARB's "fuels-general" listserve for notification of postings pertaining to motor vehicle fuels. The comment period ended on June 29, 2012. No comments were received during the second 15-day comment period.

An additional document to the regulatory record was made available for a third 15-day comment period starting on July 17, 2012, and ending on August 1, 2012, by issuance of a "Third Notice of Public Availability of Additional Documents and Information" (3rd 15-Day Notice). The 3rd 15-Day Notice, and the document entitled "California Air Resources Board Fuel Analysis Log, calendar year 2011 for CARBOB samples collected at downstream storage tanks located at bulk terminals," were posted on ARB's Internet site for the rulemaking on July 17, 2012. An email message announcing and linking to this posting was transmitted to more than 4,000 parties who have subscribed to ARB's "fuels-general" listserve for notification of postings pertaining to motor vehicle fuels. The comment period ended on August 1, 2012. No comments were received during the 3rd 15-day comment period, and the Executive Officer subsequently issued Executive Order R-12-008, adopting the amended CaRFG3 regulations with modifications as approved by the Board.

2. Modified Text

The following is a summary of the proposed substantive modifications subject to the 1st 15-Day Change Notice to the regulation and staff's rationale for proposing those modifications.

Restrictions on blending CARBOB with other materials:

1. Added provision to allow for a mixing of a CARBOB tender with a non-CARBOB tender at the interface in a pipeline to allow for fuel pipeline transportation. However, this mixture must be diverted and may not be offered, sold, or supplied as CARBOB or California gasoline.

RATIONALE: The pipelines that transport CARBOB are typically not dedicated exclusively to CARBOB. Therefore, a tender of CARBOB may, in actual practice, be followed by a tender of a non-CARBOB material such as diesel fuel. However, section 2266.5(f)(1), as originally written, would prohibit the mixing that occurs at the interface of the CARBOB and non-CARBOB material. The amendment acknowledges this practice but clarifies that the resultant mixture may not be offered, sold, or supplied as CARBOB or California gasoline.

2. Added provision to allow for the changeover of a storage tank in a terminal or bulk plant from a non-CARBOB material to CARBOB. If the resultant mixture meets the CARBOB limits, it may be treated as CARBOB. Records must be kept for two years in order for the facility to demonstrate compliance. Failure to keep records is a violation per section 2266.5(f)(1)(I).

RATIONALE: Storage tanks at terminals or bulk plants are typically not dedicated exclusively to CARBOB. Therefore, a tank that previously contained a non-CARBOB material such as diesel fuel may, in practice, be converted for storage of CARBOB. However, section 2266.5(f)(1), as originally written, would prohibit such conversion. The amendment acknowledges this practice but clarifies that the resultant mixture may be treated as CARBOB only if it meets the CARBOB limits.

3. Added provision to allow for the changeover of a storage tank in a terminal or bulk plant from a CARBOB to a non-CARBOB material. No person may offer, sell, or supply the resultant mixture as CARBOB.

RATIONALE: As discussed above, industry practice may involve the conversion of a storage tank from storing CARBOB to a non-CARBOB material. The amendment acknowledges this practice but prohibits the resultant mixture from being offered, sold, or supplied as CARBOB, because it would be predominantly a non-CARBOB material.

4. Added provision to allow for the changing of a compartment in a cargo tank truck, marine vessel, rail car, or other vessel from a CARBOB to a non-CARBOB material, or vice versa. If converting from a non-CARBOB material to CARBOB and if the residue of non-CARBOB material does not exceed 0.25 percent of the compartment's safe fill volume, the resultant mixture may be treated as CARBOB. If converting from CARBOB to non-CARBOB, the resultant mixture may not be offered, sold, or supplied as CARBOB.

RATIONALE: Compartments in cargo tank trucks, marine vessels, rail cars, and other vessels are typically not dedicated exclusively to CARBOB. Therefore, industry practice may involve the conversion of such compartments from the storage of CARBOB to a non-CARBOB material, or vice versa. The amendment acknowledges this practice but prohibits the offer, sale, or supply of the resultant mixture unless certain conditions are met in order to preserve the integrity of the CARBOB supply in California.

5. Added provision to allow for a protocol for the incidental mixing of non-CARBOB material with CARBOB during the normal and correct operation of a business.

RATIONALE: The CaRFG regulations typically provide for protocols to accommodate unusual or unanticipated situations provided certain findings are made by the Executive Officer. After discussion with stakeholders, the above four situations were discovered. While it is possible other such situations may exist, these situations would be prohibited by the CaRFG regulations without a protocol. The amendment allows for such protocols if certain conditions are met.

The following is a summary of the proposed substantive modification subject to the 2nd 15-Day Change Notice to the regulation and staff's rationale for proposing the modification.

Restrictions on blending CARBOB with other materials:

Added an exception to allow for mixing of CARBOB with vapor recovery condensate.

RATIONALE: Industry expressed a desire to blend vapor recovery condensate with CARBOB. The additional proposed modification will allow for the mixing of vapor recovery condensate with CARBOB in specified situations.

It should be noted that in the posted Attachment A to the Second 15-Day Modifications to the Original Proposal, section 2265.1(a)(3)(A)7 was inadvertently stricken (indicated by single strike-out). This was corrected, but no comments were solicited because this was an unintended deletion.

It should also be noted that in the references section of the Staff Report, the release date for the Staff Report: Initial Statement of Reasons: *Proposed 2007 Amendments to the California Reformulated Gasoline Regulations* is dated as October 22, 1999. The correct release date for this report should be April 27, 2007.

The 3rd 15-Day Notice placed an additional document into the regulatory record and provided the public with one document issued by the ARB in support of the proposed modifications from the 2nd 15-Day Change Notice. This document is a compilation of ARB's laboratory data for total oxygenates in CARBOB samples collected at downstream storage tanks located at bulk terminals for calendar year 2011. Only CARBOB samples collected at downstream storage tanks located at bulk terminals are included because that is where ARB would expect to see mixtures of vapor recovery condensate with CARBOB. Of the entire dataset, there were ten instances where 0.1 percent by weight total oxygenates were reported. Most of the data reflected 0.0 percent by weight, and none of the samples exceeded 0.1 percent by weight total oxygenates. These data support the proposed modifications from the 2nd 15-Day Change Notice. This document enabled the public to understand ARB staff's proposal to allow for mixing of CARBOB with vapor recovery condensate, provided the resulting mixture of CARBOB has an oxygen content not exceeding 0.1 percent by weight.

II. EXTERNAL PEER REVIEW

Health and Safety Code section 57004 requires an external scientific peer review of the scientific basis for those rules, based on empirical data and scientific findings, ARB is considering for adoption.

For this rulemaking, external peer reviews were not necessary since the four 2007 external peer reviewers generally agreed with staff's scientific basis supporting the 2007 CaRFG3 amendments, staff's estimates of emission impacts, and that the

2007 proposed amendments would have no significant adverse impact on public health and the environment. As the 2011 amendments are merely implementing what was intended in the 2007 rulemaking, the scientific basis has not changed. Therefore, the conclusions of the peer reviewers in the 2007 rulemaking also apply to the 2011 amendments.

III. CALIFORNIA ENVIRONMENTAL POLICY COUNCIL

Health and Safety Code section 43830.8, (Stats. 1999, Ch. 813; Senate Bill 529, Bowen) generally prohibits ARB from adopting a regulation establishing a specification for motor vehicle fuel unless the regulation is subject to a multimedia evaluation by the California Environmental Policy Council (Policy Council). Key components of the evaluation process are the identification and evaluation of significant adverse impacts on public health or the environment and the use of best available scientific data.

Multimedia evaluation means the identification and evaluation of any significant adverse impact on public health or the environment, including air, water, or soil, that may result from the production, use, or disposal of the motor vehicle fuel that may be used to meet the state board's motor vehicle fuel specifications.

The statute provides that ARB may adopt a regulation that establishes a specification for motor vehicle fuel without the proposed regulation being subject to a multimedia evaluation if the Policy Council, following an initial evaluation of the proposed regulation, conclusively determines that the regulation will not have any significant adverse impact on public health or the environment.

ARB staff determined that the proposed amendments do not substantially change specifications of Phase 3 CaRFG gasoline and will not require a gasoline ingredient to be added or removed beyond what is allowed by the existing regulations or is currently already used to produce gasoline for sale in California. Therefore, staff believes that the proposed amendments to the Phase 3 CaRFG regulations are not subject to the requirement for a multimedia evaluation.

IV. DIFFERENCES BETWEEN STATE AND FEDERAL REGULATIONS

In accordance with Government Code section 11346.2(b)(5)(B), the Executive Officer has determined that the differing state regulations are authorized by law and that the cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.

Health and Safety Code section 43013.1(b) requires that ARB ensure the CaRFG3 regulations maintain or improve upon emissions benefits achieved by the CaRFG2 regulations. Therefore, the 2011 amendments are mandated by law.

The 2011 amendments to the Phase 3 CaRFG regulations were intended, among other things as discussed above, to update the Predictive Model in order to preserve the emissions and air quality benefits of the Phase 2 CaRFG program. There were

drafting errors to nine coefficients in the California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model (Procedures Guide). The proposed 2011 amendments will correct these errors, and thereby preserve the emissions and air quality benefits of the Phase 2 CaRFG program. Therefore, benefits to human health, public safety, public welfare, and/or the environment is expected through the 2011 amendments.

V. FISCAL IMPACTS

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district, the costs of which are or are not reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

Government Code sections 11342 et. seq. require ARB to consider any adverse effects on small businesses that would have to comply with a proposed regulation. In defining small business, Government Code section 11342 explicitly excludes refiners from the definition of "small business." Also, the definition includes only businesses that are independently owned and, if in retail trade, gross less than \$2,000,000 per year. Thus, our analysis of the economic effects on small business is limited to the costs to gasoline retailers and jobbers, retailers, and gasoline fuel end-users. A jobber is an individual or business that purchases wholesale gasoline and delivers and sells it to another party, usually a retailer or other end-user.

VI. CONSIDERATION OF ALTERNATIVES

A discussion of alternatives to the initial regulatory proposal is found in Chapter VI of the Staff Report. For the reasons set forth in the Staff Report, staff's comments and responses at the hearings, and this Final Statement of Reasons, the Board has determined that no alternative considered by the agency or that has otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board.

VII. INCORPORATION OF MATERIALS BY REFERENCE

Section 2265(a)(2)(A)2. incorporates the "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model." Sections 2265(a)(2)(A)3. – 2265(a)(2)(A)6. incorporate the "California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model." The regulation identifies the incorporated documents by title and date. The incorporated documents are readily available from ARB upon request, were made available in the context of this rulemaking in the manner specified in Government Code section 11346.5(b).

The CaRFG3 Predictive Model Procedures are incorporated by reference, because it would be cumbersome and impractical to print the roughly 74-page document in the CCR. Existing ARB administrative practice has been to have the Predictive Model procedures incorporated by reference rather than printed in the CCR because these procedures are highly technical and complex, have pages of equations and numerous tables, include various worksheets, and have a very limited audience. The affected public is accustomed to the incorporation format used for these procedures.

VIII. SUMMARY OF COMMENTS AND AGENCY RESPONSE

A. 45-Day Comment Period

During the 45-day comment period, the Board did not receive any written comments. In addition, no oral testimony or written comments were presented at the October 21, 2011 hearing.

B. 1st 15-Day Comment Period

During the 1st 15-day comment period, the Board received one public comment. Table 1 below identifies the commenter. Following Table 1 is a summary of each recommendation made regarding the proposed action, together with an explanation of how the proposed action has been changed to accommodate the recommendation or the reasons for making no change.

Table 1: Comments Received from the 1st 15-day Comment Period

Abbreviation	Commenter
WSPA	Catherine H. Reheis-Boyd, Western States Petroleum Association Written Comment: May 30, 2012

Exceptions to Prohibition Against Combining CARBOB with Other Materials

1. Comment: WSPA notes that the proposed 15-day changes involve clarification of exceptions to the basic prohibition against combining CARBOB with other materials. The blending of vapor recovery condensate into CARBOB is appropriately permitted under the current regulations, based on:

1. Section 2266.5(h) specifically exempts vapor recovery condensate from the prohibition against the combination of California gasoline which has been supplied from a production or import facility with any non-oxygenate blendstock; and
2. Section 2266.5(a)(1) states that "Whenever the term "California gasoline" is used in the sections identified in the preceding sentence, the term means "California gasoline or CARBOB.", and the referenced sections include 2266.

For this reason and since clarifications are being added in the current 15-day changes regarding the combination of CARBOB with other materials, WSPA recommends that ARB add an additional clarifying paragraph to 2266.5(f)(1) as indicated below:

(K) Vapor recovery condensate.

The addition of this paragraph will add clarity to the regulation within 2266.5(f)(1). (WSPA)

Response: ARB generally agrees with WSPA's summary of sections 2266.5(h) and 2266.5(a)(1). However, ARB disagrees with WSPA's conclusion that these sections, taken together, mean that the current regulations explicitly authorize the blending of vapor recovery condensate with CARBOB. It is true that section 2266.5(a)(1) states "Whenever the term 'California gasoline' is used in the sections identified in the preceding sentence, the term means 'California gasoline or CARBOB.'" WSPA is also correct in noting that the referenced sections include section 2266. However, section 2266 relates to certified gasoline formulations resulting in equivalent emission reductions based on motor vehicle emissions testing, i.e., test-certified alternative gasoline formulations. The prohibition against blending CARBOB with other materials is not in section 2266; it is in 2266.5. Section 2266.5 is not listed in section 2266.5(a)(1), which means that, anywhere "California gasoline" appears in section 2266.5, it means just that, California gasoline. Anywhere "CARBOB" appears in section 2266.5, it means CARBOB and nothing more. Therefore, the sections cited by WSPA do not support its claim that the current regulations authorize the blending of vapor recovery condensate with CARBOB.

Nonetheless, there is some merit to WSPA's suggestion. Indeed, after discussions with WSPA and among ARB staff, ARB agrees that vapor recovery condensate may be blended with CARBOB in certain situations. However, restrictions must be imposed to ensure the quality of the CARBOB supply in California. For example, if vapor recovery condensate contained ten percent oxygen, a disproportionate volume of this vapor recovery condensate was blended with CARBOB, and the resultant "CARBOB" was subsequently oxygenated to ten percent oxygen with the assumption that the "CARBOB" contained zero percent oxygen, the finished "gasoline" would be over-oxygenated. This could have detrimental effects on engines ill-equipped to handle more than ten percent oxygen.

ARB reviewed the results of its CARBOB samples taken at terminals throughout California during calendar year 2011. Of the roughly 389 results, most were 0.0 percent by weight oxygen, except for ten results that were 0.1 percent by weight oxygen. None of the samples exceeded 0.1 percent by weight oxygen. Based on these data, ARB

agrees with WSPA's recommendation, provided the resulting mixture of CARBOB has an oxygen content not exceeding 0.1 percent by weight.

Modification of 2266.5(f)(1)(E)(4)

2. **Comment:** We have an additional suggestion to modify 2266.5(f)(1)(E)(4) with regard to the current requirement to notify ARB before putting CARB gasoline containing ethanol back into a CARBOB tank. We would like to see the notification prior to mixing removed, provided documents are maintained at the terminal for 2 years. Removing the notification prior to mixing CARB gasoline into CARBOB, so long as the necessary records are maintained for 2 years, is consistent with the approach ARB has proposed in this 15 day package to convert a terminal tank from non-CARBOB material to CARBOB in new section 2266.5(f)(1)(I). The suggested deletion is shown below in red strikethrough and the new language is shown in bold blue underlined font.

Title 13 § 2266.5(f)(1)(E)

(E) Limited amounts of California gasoline containing ethanol. A person may add California gasoline containing ethanol to CARBOB at a terminal or bulk plant if all of the following conditions are met, in which case the resulting mixture will continue to be treated as CARBOB....

4. Prior to the mixing, the operator of the terminal or bulk plant ~~notifies the executive officer of~~ **documents in writing** the following:
- a. The identity and location of the facility at which the mixing will take place;
 - b. The operational reason for adding the gasoline into the CARBOB;
 - c. The projected percentage oxygen content of the mixture.
5. The terminal or bulk plant operator maintains for two years records documenting the information identified in section 2266.5(f)(1)(E)4, and makes them available to the executive officer upon request. (WSPA)

Response: This suggested change is beyond the scope of the rulemaking or 15-day changes. WSPA proposes to change the existing requirement to *notify* ARB prior to mixing CARBOB with limited amounts of California gasoline containing ethanol to simply *documenting* specified information. No proposed amendment to section 2266.5(f)(1)(E) was originally made available to the public pursuant to Government Code section 11346.5 or in the 15-Day notices. Therefore modifying, section 2266.5(f)(1)(E) was not within the scope of this rulemaking.

C. 2nd 15-Day Comment Period

During the 2nd 15-day comment period, the Board did not receive written comments.

D. 3rd 15-Day Comment Period

During the 3rd 15-day comment period, the Board did not receive written comments.