

State of California  
AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking  
Including Summary of Comments and Agency Responses

**PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE CALIFORNIA  
REFORMULATED GASOLINE REGULATIONS, INCLUDING AMENDMENTS  
REGARDING THE DOWNSTREAM BLENDING OF OXYGENATES**

Public Hearing Date: December 14, 1995  
Agenda Item No.: 95-13-2

**I. GENERAL**

This rulemaking was initiated by the publication on October 27, 1995, of a notice of public hearing to consider amendments to the California reformulated gasoline (CaRFG) regulations, including amendments regarding the downstream blending of oxygenates and other technical matters. A Staff Report (Initial Statement of Reasons for Proposed Rulemaking) was also made available for public inspection on October 27, 1995. The Staff Report, which is incorporated by reference herein, contained the text of the regulatory amendments as initially proposed by the staff, along with an extensive description of the rationale for the proposal. The proposed action consisted of the adoption of sections 2263.7 and 2266.5, and amendments to sections 2260, 2262.5, 2264, 2265, and 2272 of Title 13, California Code of Regulations.

On December 14, 1995, the Air Resources Board (ARB) conducted a public hearing at which it received written and oral comments on the regulatory proposal. At the conclusion of the hearing, the Board approved regulatory amendments by adopting Resolution 95-48. As approved, the amendments included a number of modifications to the originally proposed text, reflecting suggestions made by the staff at the December 14, 1995 hearing. In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to make the approved amendments, with such other conforming modifications as may be appropriate, available to the public for a supplemental written comment period of 15 days. He was then directed either to adopt the amendments with such additional modifications as may be appropriate in light of the comments received, or to present the regulations to the Board for further consideration if warranted in light of the comments.

The modified text of the amendments, in the form approved by the Board, were made available for a 15-day comment period by issuance of a "Notice of Public Availability of Modified Text" on December 22, 1995. No written comments were received during the 15-day comment period. The Executive Officer then issued Executive Order G-96-002, adopting the amendments.

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 reimbursable pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

The Board has determined that no alternative considered by 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.

## II. SUMMARY OF MODIFICATIONS

This section summarizes the modifications made to the originally proposed regulatory text, and explains the rationale for the modifications. The modifications are listed in the order they appear in the Final Regulation Order. Most of the modifications resulted from informal comments to the staff from oil refiners and other interested parties.

**1. Definition of "oxygenate blending facility":** The modifications expand the kind of additives that can be added to gasoline or CARBOB at an oxygenate blending facility without making it a production facility or making the blender the "producer" of any portion of the resulting blend. The justification for excluding deposit control additives applies equally to other similar additives such as corrosion inhibitors. (Title 13, California Code of Regulations, §§ 2260(a)(19.3) and (a)(26)(C).)

**2. Restrictions on adding oxygenates to California gasoline downstream from the refinery:** The originally proposed amendments deleted provisions allowing oxygenates to be added under certain circumstances to California gasoline produced by another entity, on the premise that CARBOB was the only product into which oxygenates should be blended downstream of the refinery. Some refiners asked that the original approach be maintained, so as not to preclude a refiner from supplying a low- or no-oxygenate gasoline that could be marketed either in that form outside federal RFG areas, or with additional oxygenate added downstream to meet U.S. EPA requirements in federal RFG areas. The modified text will allow oxygenates to be added to downstream California gasoline as long as the gasoline has been reported as an alternative formulation under the predictive model or vehicle testing options, it has not been commingled with other gasoline, and the oxygen content of the gasoline meets the oxygen specification for the alternative formulation both before and after the additional oxygenate is added. (§ 2262.5(d); conforming modification to § 2266.5(a)(1).)

**3. Protocols on application of the "designated alternative limit" (DAL) requirements:** A modification makes clear that protocols may be used to specify how the offsetting requirements for DALs are applied to individual refiners as well as how the notification requirements are applied. The DAL protocol provisions in the CaRFG regulations were patterned after the DAL protocol provisions in the regulation limiting the aromatic hydrocarbon content of diesel fuel--Title 13, California Code of Regulations, section 2282. The diesel fuel regulation

authorizes protocols addressing not only the DAL notification requirements, but also the requirement that within 90 days before or after the start of physical transfer of a final blend of diesel fuel with a "debit" DAL from the refinery, the refiner must complete physical transfer of sufficient quantities of diesel fuel with a "credit" DAL to offset the debit. (§ 2282(d)(5).) When the DAL language in the CaRFG regulations was drafted with separate subsections on offsetting each property subject to averaging, the reference in the protocol provision to the offsetting requirements was inadvertently omitted. As has previously been the case, in order to enter into a protocol the Executive Officer must determine that application of the regulatory requirements under the protocol is not less stringent or enforceable than application of the express terms of the regulation. (§ 2264(a)(4).)

**4. Changing from one predictive model (PM) alternative formulation to another:** The originally proposed amendments create an exception from the requirement that a producer is not permitted to switch from one PM alternative formulation to another PM alternative formulation if there are outstanding deficits for any property being averaged. The exception applies where the only change is that a PM flat limit is changed to the equivalent PM averaging limit for one or more properties.

Modifications revise the originally proposed exception and add another limited exception. The revision to the originally proposed exception explicitly provides that the refiner may change the PM flat limits for more than one property to PM averaging limits if there are no changes to the PM alternative specifications for the remaining properties and the new PM alternative formulation meets the predictive model criteria. The new exception allows the refiner to switch one PM averaging limit to a PM flat limit, if there are no outstanding debits for that averaging limit, there are no changes to the specifications for any other properties, and the revised PM alternative formulation meets the predictive model criteria. The staff concluded that these narrowly crafted exceptions will provide additional flexibility while not resulting in adverse emissions impacts. (§2265(c)(2).)

**5. Use of a representative oxygenate in determining whether CARBOB complies with the CaRFG standards.** In order to determine whether CARBOB supplied from a refinery meets the CaRFG standards, the appropriate volume and type of oxygenate is added to the CARBOB before its properties are analyzed. The original proposal includes a requirement that the oxygenate added be representative of the oxygenate the refiner reasonably expects will be subsequently added at the oxygenate blending facility. This requirement is needed because different batches of a given oxygenate such as ethanol or MTBE can vary in ways that can have a significant impact on the properties of the oxygenated gasoline blend. The modifications add an additional requirement that a refiner producing CARBOB must enter into a protocol setting forth how the representativeness of the oxygenate will be determined. This will help assure that the refiner's actions to determine representativeness are reasonable and appropriate. (§ 2266.5(a)(2).)

**6. Determining whether CARBOB complies with the CaRFG standards when more than one oxygenate is designated:** The originally proposed amendments provide that where the

refiner has identified a range of amounts for the designated oxygenate, the smallest volume designated is to be used in determining the properties and volume of the CARBOB for purposes of compliance with the CaRFG standards. It is appropriate for the regulation to also specify how oxygenate will be added in determining compliance when more than one oxygenate has been specified, because some oxygenates require greater volumes than others to achieve a given weight percentage of oxygen. Thus the modified text provides that where the refiner has designated more than one oxygenate for the CARBOB, the properties and volume of the CARBOB will be determined by adding the oxygenate with the smallest designated volume. (§ 2266(a)(2)&(3).)

**7. Documentation when CARBOB is transferred:** The original proposal includes a requirement that persons transferring CARBOB provide the transferee with a document stating that the CARBOB does not comply with the CaRFG standards without the addition of oxygenate, and identifying the type and amount of oxygenate that must be added. The requirement was modified to allow pipeline operators to meet the requirement by using standardized product codes on pipeline tickets, where the code(s) specified for the CARBOB are identified in a manual that is distributed to transferees of the CARBOB and that sets forth all of the required information for the CARBOB. (§ 2266.5(d).)

**8. Restrictions on blending CARBOB with other products:** The originally proposed amendments prohibit blending CARBOB that has been shipped from a refinery with any other CARBOB, gasoline, blendstock or oxygenate with two exceptions--it can be blended with oxygenate of the type and amount specified by the refiner, and it can be combined with other CARBOB for which the same oxygenate type and amount was specified by the refiner. These provisions are essentially identical to the federal provisions in 40 C.F.R. § 80.78(a)(7). A refiner indicated that it is not practical to completely segregate products when there is a change in service of a gasoline storage tank--for instance a change from "wintertime" CARBOB designated for blending with ethanol to "summertime" gasoline oxygenated with MTBE. Even when the tank is pumped as low as possible, there typically is a residual "heel" of product in the tank. A modification will authorize protocols that identify circumstances in which CARBOB may lawfully be combined with California gasoline or with different CARBOB during a changeover in service of a storage tank for a legitimate business reason. (§ 2266.5(f).)

**9. Downstream blending of California gasoline with nonoxygenate blendstocks:** Consistent with the federal RFG approach, the originally proposed amendments prohibit persons from blending nonoxygenate blendstocks into California gasoline that has already been shipped from the refinery, unless the person can demonstrate that the blendstocks meet all the CaRFG standards without regard to the properties of the gasoline into which the blendstocks are added. An exception is provided for adding deposit control additives, and protocols are authorized to allow transmix to be blended into CaRFG under certain circumstances.

The Board made several modifications to this provision. First, the reference to deposit control additives has been deleted because they are not a blendstock covered by the basic prohibition (and are not mentioned in the corresponding federal regulation, 40 C.F.R.

§80.78(a)(5). Second, an exception is provided for adding vapor recovery condensate into California gasoline; such condensate typically will meet or be close to the CaRFG standards and blending it into CaRFG is the most reasonable disposition of it. Third, protocols will be allowed for transmix blending when alternatives are not "practical" instead of not "practicable." Finally, an additional exception is made for adding nonoxygenate blendstock to California gasoline that exceeds one or more of the cap limits, where the person adding the blendstock obtains the prior approval of the Executive Officer based on a demonstration that the blending is a reasonable means of bringing the gasoline into compliance with the cap limits. This sort of remedial action will likely be needed when there is no readily available complying gasoline or blendstock that could be used to bring the off-spec gasoline into compliance. (§ 2266.5(i).)

### III. SUMMARY OF COMMENTS AND AGENCY RESPONSES

Written comments were received from the California Renewable Fuels Council (CRFC), Ultramar Inc. (Ultramar), 76 Products Company, and Richard Seeley (Seeley). The Western States Petroleum Association (WSPA), Texaco, Chevron, and the CRFC presented oral testimony. No comments were received during the 15-day comment period.

WSPA, CRFC, Ultramar, 76 Products Company, Texaco and Chevron generally supported the modified amendments approved by the Board and subsequently adopted; these statements of support are not separately summarized. Several comments did not address the specific adoption and amendments being proposed--for instance, WSPA and Texaco urged that the Board assure that ARB staff attend a January 12, 1996 meeting in Washington D.C. on overlap issues involving the federal and California RFG regulations, and the CRFC urged that the Board direct staff to propose regulatory amendments that would continue the Reid vapor pressure (RVP) allowance for gasoline blends of at least 4.9 volume percent ethanol that has applied during October 1993, 1994 and 1995. Since these comments were not specifically directed at the ARB's proposed action or to the procedures followed by the ARB in the rulemaking, they generally are not addressed in this Final Statement of Reasons.

1. **Comment:** Section 2264(j) refers to the offsetting of "exceedances." We suggest replacing the term "exceedances" with "DALs above averaging limits" or something similar. The term "exceedance" is inappropriate in this section because it implies that the blend does not meet specifications. In fact, this reference refers to a blend with a DAL that is above the averaging limits but below the cap limit for a specific property. (76 Products Company)

**Agency Response:** Sections 2264(c) through (h) refer to the need to provide offsets for final blends of gasoline "exceeding" the specified averaging limits. Accordingly, the reference in Section 2264(j) to "offsetting the exceedance" as described in sections (c) through (h) is not inappropriate.

2. **Comment:** Why not continue the required oxygen content program throughout the spring and summer when most of the driving is done? Why not allow just a 1.8 wt. % of oxygen year-round if it is so successful in reducing carbon monoxide emissions? (Seeley)

**Agency Response:** A minimum oxygen content of 1.8 wt. % is required in the winter months when all of the exceedances of the federal and state ambient air quality standards for carbon monoxide have occurred in California. During the rest of the year, refiners must meet the 1.8 wt. % standard unless they sell an alternative formulation that meets the criteria of the predictive model. The predictive model evaluates effects on emissions of hydrocarbons, oxides of nitrogen, and toxic air contaminants. We believe that the increased efficiencies that may result from use of the predictive model outweigh the slight increases in CO emissions that might occur in the summer months when CO concentrations tend to be at their lowest.

3. **Comment:** The hearing notice states that,

"The CaRFG regulations allow gasoline with less than the required minimum oxygen content to be shipped from a production or import facility, as long as the producer or importer takes appropriate measures to assure that the minimum levels of oxygen will be added before the gasoline is shipped from the final distribution facility."

How is this factor enforced or who checks on the producer or importer to make sure that minimum levels of oxygen have been added to the gasoline? (Seeley)

**Agency Response:** The quoted language describes the approach of the CaRFG regulations to the downstream blending of oxygenates prior to this rulemaking. The amendments adopted by the Board contain a number of mechanisms designed to assure that the necessary volume of oxygenates are added to CARBOB. Producers of CARBOB must conduct a quality audit sampling and testing program to verify that the CARBOB is being oxygenated appropriately (§2266.5(g)), oxygenate blenders are required to register with the ARB, to add oxygenate to any CARBOB which the blender has agreed to oxygenate, and to sample and test CARBOB after it is oxygenated (§2266.5(h)).