

CaRFG3 REGULATIONS FOLLOW-UP AMENDMENTS

SEPTEMBER 11, 2000 PRELIMINARY DRAFT

A. AMENDMENTS PERTAINING TO CARBOB AND SPECIFICATIONS FOR DENATURED ETHANOL FOR USE IN MOTOR VEHICLES

Add section 2260(a)(6.7) to read as follows:

Section 2260. Definitions.

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- (a) (6.7) “CARBOB alternative specifications” means, for a final blend of CARBOB, CARBOB specifications that identify all of the properties identified in a set of PM alternative specifications, expressed at the same level of precision.

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Amend section 2266.5, title 13, California Code of Regulations to read as follows:

Section 2266.5. Requirements Pertaining to California Reformulated Gasoline Blendstock for Oxygen Blending (CARBOB) and Downstream Blending.

(a) *Application of the California gasoline standards to CARBOB.*

- (1) *Applicability of standards and requirements to CARBOB.* All of the standards and requirements in sections 2261, 2262, 2262.3, 2262.4, 2262.5(a), (b), (c) and (e), 2262.6, 2264, 2264.2, ~~2264.4~~, 2265, 2266, 2267, 2268, 2270(b) and (c), 2271 and 2272 pertaining to California gasoline or transactions involving California gasoline also apply to CARBOB or transactions involving CARBOB. Whenever the term “California gasoline” is used in the sections identified in the preceding sentence, the term means “California gasoline or CARBOB.” Whenever the term “gasoline” is used in section 2265(b)(1), the term means “California gasoline or CARBOB.”
- (2) *Determining whether a final blend of CARBOB complies with the standards for California gasoline.*

(A) General.

1. Where a producer or importer has designated a final blend as CARBOB and has complied with all applicable provisions of this section 2266.5, the properties of the final blend for purposes of compliance with sections 2262, 2262.3, 2262.4, 2262.5, ~~and 2262.6, 2265 and 2266~~ shall be determined in accordance with section (a)(2)(B) or (a)(2)(C) as applicable. ~~by adding the specified type and amount of oxygenate to a representative sample of the CARBOB and determining the properties and characteristics of the resulting gasoline in accordance with an~~

applicable test method identified in section 2263(b) or permitted under section 2263(c). Where the producer or importer has in accordance with section (b)(1)(C) designated a range of amounts of oxygenate, or more than one oxygenate type, to be added to the CARBOB, the minimum designated amount of the oxygenate having the smallest designated volume shall be added to the CARBOB when determining the properties and characteristics of the final blend:

2. If the producer or importer has not complied with ~~any~~ all applicable provisions of this section 2266.5, the properties of the final blend for purposes of the producer's or importer's compliance with the limits for sulfur, benzene, aromatic hydrocarbons, olefins, T50, T90, and oxygen required by sections 2262.3, and 2262.5, 2265 and 2266 shall be determined without adding oxygenate to the gasoline, and compliance with the flat limits for Reid vapor pressure and oxygenates required by sections 2262.4, 2262.6, 2265 and 2266 shall be determined in accordance with section (a)(2)(B) or (a)(2)(C) as applicable.

(B) Determining whether a final blend of CARBOB complies with the standards for California gasoline by use of the CARBOB Model.

1. A producer or importer may elect to have the CARBOB model used in determining whether a final blend designated as CARBOB complies with the standards applicable to California gasoline when it is supplied from the production facility or import facility, by providing the notice in section (b)(1)(C). In this case, the CARBOB alternative specifications for the final blend shall be determined in accordance with [Insert title of CARBOB Model Procedures document]. The final blend's compliance with the assigned CARBOB alternative specification for a property shall constitute the final blend's compliance with that property's assigned PM flat limit, designated alternative limit, or (if no designated alternative limit has been established) PM averaging limit.
2. Notwithstanding section (a)(2)(B)1., where a final blend of CARBOB is sampled and analyzed by a state board inspector in accordance with section 2263 using the methodology in (a)(2)(C), the results may be used to establish a violation of applicable standards for California gasoline.

(C) Determining whether a final blend of CARBOB complies with the standards for California gasoline by oxygenate blending and testing.

1. **Oxygenate blending and testing.** Except as otherwise provided in section (a)(2)(B), the properties of a final blend of CARBOB shall be determined for purposes of compliance with sections 2262, 2262.3, 2262.4, 2262.5 2262.6, 2265 and 2266 by adding the specified type and amount of oxygenate to a representative sample of the CARBOB and determining the properties and characteristics of the resulting gasoline in accordance with an applicable test method identified in section 2263(b) or permitted under section 2263(c). Where the producer or importer has in accordance with section (b)(1)(C) designated a range of amounts of oxygenate,

or more than one oxygenate type, to be added to the CARBOB, the minimum designated amount of the oxygenate having the smallest designated volume shall be added to the CARBOB when determining the properties and characteristics of the final blend.

~~(B) In determining whether CARBOB complies with the standards for California gasoline: the oxygenate added must be representative of the oxygenate the producer or importer reasonably expects will be subsequently added to the final blend. Prior to supplying CARBOB from a production or import facility, the producer or importer must enter into a protocol with the executive officer setting forth how the representativeness of the oxygenate will be determined.~~

2. Characteristics of denatured ethanol used in determining whether a final blend of CARBOB complies with the standards for California gasoline.

a. Except as provided in section (a)(2)(C)2.b., in determining whether CARBOB complies with the standards applicable to California gasoline when it is supplied from the production facility or import facility, denatured ethanol used as the oxygenate must have the following properties:

<u>Sulfur content:</u>	<u>5 - 10 parts per million</u>
<u>Benzene content:</u>	<u>0 - 0.10 volume percent</u>
<u>Olefin content:</u>	<u>0 - 0.10 volume percent</u>
<u>Aromatic hydrocarbon content:</u>	<u>0 - 1.70 volume percent</u>

b. A producer or importer may elect to specify the properties of the oxygenate used in determining whether a final blend of CARBOB complies with the standards applicable to California gasoline when it is supplied from the production facility or import facility, by providing the notice in section (b)(1)(D). In this case, the oxygenate must meet the ranges of specifications identified in the section (b)(1)(D) notification.

c. A producer or importer who is electing to specify the properties of the oxygenate used in a final blend in accordance with the preceding section (a)(2)(C)2.b. must maintain at the production or import facility, while the final blend is at the facility, quantities of oxygenate meeting the specifications that are sufficient to enable state board inspectors to use the oxygenate in compliance determinations.

(3) Calculating the volume of a final blend of CARBOB. Where a producer or importer has designated a final blend as CARBOB and has complied with all applicable provisions of this section 2266.5, the volume of a final blend shall be calculated for all purposes under section 2264 by adding the minimum designated amount of the oxygenate having the smallest volume designated by the producer or importer. If the producer or importer has not complied with any applicable provisions of this section 2266.5, the volume of the final blend for purposes of the refiner or producer's compliance with sections 2262, 2262.3,

2262.4, 2262.5, ~~and 2262.6~~, 2265 and 2266 shall be calculated without adding the amount of oxygenate to the CARBOB.

- (4) **Specifications for a final blend of CARBOB when the CARBOB model is not being used.** ~~No~~ A producer or importer who has not elected to use the CARBOB model pursuant to section (a)((2)(B) with regard to a final blend of CARBOB may not sell, offer for sale, supply or offer for sale ~~a~~ that final blend of CARBOB from its production facility or import facility where the sulfur, benzene, olefin or aromatic hydrocarbon content of the CARBOB, when multiplied by (1 - the designated minimum volume the oxygenate will represent, expressed as a decimal fraction, after it is added to the CARBOB), results in a sulfur, benzene, olefin or aromatic hydrocarbon content value exceeding the applicable limit for that property ~~under section (a)(2).~~

- (5) **Determining whether downstream CARBOB complies with the cap limits for California Gasoline.**

(A) **Application of CARBOB cap limits derived from the CARBOB Model.** No person may sell, offer for sale, supply, offer for supply, or transport CARBOB that is designated for blending with the following ranges of ethanol and has been supplied from its production or import facility, where the CARBOB exceeds the following CARBOB cap limits:

<u>Property</u>	<u>CARBOB Cap Limits</u>					
	<u>4.7 - 5.7 vol. % Ethanol Range</u>		<u>6.5 - 8.0 vol. % Ethanol Range</u>		<u>9.1 - 10.0 vol. % Ethanol Range</u>	
	<u>CaRFG2</u>	<u>CaRFG3</u>	<u>CaRFG2</u>	<u>CaRFG3</u>	<u>CaRFG2</u>	<u>CaRFG3</u>
<u>Reid Vapor Pressure¹</u> (pounds per square inch)	<u>5.78</u>	<u>5.99</u>	<u>5.78</u>	<u>5.99</u>	<u>5.78</u>	<u>5.99</u>
<u>Sulfur Content</u> (parts per million by weight)	<u>84</u>	<u>63²</u>	<u>85</u>	<u>64²</u>	<u>88</u>	<u>65²</u>
		<u>31²</u>		<u>32²</u>		<u>32²</u>
<u>Benzene Content</u> (percent by volume)	<u>1.26</u>	<u>1.15</u>	<u>1.28</u>	<u>1.17</u>	<u>1.31</u>	<u>1.21</u>
<u>Aromatics Content</u> (percent by volume)	<u>31.4</u>	<u>36.6</u>	<u>32.0</u>	<u>37.3</u>	<u>32.8</u>	<u>38.3</u>
<u>Olefins Content</u> (percent by volume)	<u>10.5</u>	<u>10.5</u>	<u>10.7</u>	<u>10.7</u>	<u>10.9</u>	<u>10.9</u>
<u>T50</u> (degrees Fahrenheit)	<u>226</u>	<u>226</u>	<u>226</u>	<u>226</u>	<u>226</u>	<u>226</u>
<u>T90</u> (degrees Fahrenheit)	<u>332</u>	<u>332</u>	<u>333</u>	<u>333</u>	<u>334</u>	<u>334</u>

¹ The Reid vapor pressure standards apply only during the warmer weather months identified in section 2262.4.

² The CaRFG Phase 3 CARBOB cap limits for sulfur are phased in starting December 31, 2002, and December 31, 2004, in accordance with section 2261(b)(1)(A).

(B) Determining whether downstream CARBOB complies with the cap limits for California gasoline by oxygenate blending and testing. No person may sell, offer for sale, supply, offer for supply, or transport CARBOB that has been supplied from the production or import facility and that exceeds an applicable cap limit set forth in section 2262. To determine whether the cap limit is exceeded, the specified type and amount of oxygenate is added to a representative sample of the CARBOB and the properties and characteristics of the resulting gasoline are determined in accordance with an applicable test method identified in section 2263(b) or permitted under section 2263(c). Where the CARBOB has been designated for a range of amounts of oxygenate, or more than one oxygenate type, to be added, the minimum designated amount of the oxygenate having the smallest designated volume is to be added to the CARBOB when determining the properties and characteristics of the final blend. Denatured ethanol used as the oxygenate must have the properties set forth in section (a)(2)(C)2.a.

(C) A person may enter into a protocol with the Executive Officer for the purpose of identifying more stringent specifications for the denatured ethanol used pursuant to

section (a)(5)(B), or different CARBOB cap limits under section (a)(5)(A), if the Executive Officer reasonably determines that the specifications or cap limits are reasonably premised on the person's program to assure that the denatured ethanol added to the CARBOB by oxygenate blenders will meet the more stringent specifications.

(b) *Notification regarding the supply of CARBOB from the facility at which it was produced or imported.*

(1) A producer or importer supplying a final blend of CARBOB from the facility at which the producer or importer produced or imported the CARBOB must notify the executive officer of the information set forth below. The notification must be received by the executive officer before the start of physical transfer of the final blend of CARBOB from the production or import facility, and in no case less than 12 hours before the producer or importer either completes physical transfer or commingles the final blend.

(A) The identity and location of the final blend;

(B) The designation of the final blend as CARBOB;

(C) If the producer or importer is electing to use the CARBOB model to determine whether the final blend complies with the standards applicable to California gasoline when it is supplied from the production facility or import facility, a statement of that election and each of the CARBOB alternative specifications that will apply to the final blend (along with the information required under section 2265(a)(2));

(D) If the producer or importer is electing to specify the properties of the oxygenate to be used in determining whether the final blend complies with the standards applicable to California gasoline when it is supplied from the production facility or import facility, a statement of that election, the type of oxygenate, and the oxygenate's specifications for the following properties (not to exceed the limits set forth in section 2262.9(a)(1));

<u>Sulfur content:</u>	<u>Within a range of 5 parts per million</u>
<u>Benzene content:</u>	<u>Within a range of 0.10 volume percent</u>
<u>Olefin content:</u>	<u>Within a range of 0.10 volume percent</u>
<u>Aromatic hydrocarbon content:</u>	<u>Within a range of 1.00 volume percent</u>

(C)(E) The designation of each oxygenate type or types and amount or range of amounts to be added to the CARBOB. The amount or range of amounts of oxygenate to be added shall be expressed as a volume percent of the gasoline after the oxygenate is added, in the nearest tenth of a percent. For any final blend of CARBOB except one that is subject to PM alternative specifications or is reported as an alternative formulation in accordance with section 2266(c), the amount of oxygenate to be added must be such that the resulting California gasoline will have a minimum oxygen content no lower than 1.8 percent by weight and a maximum oxygen content no greater than 2.2 percent by weight. For a final blend of CARBOB that is subject to

PM alternative specifications, the amount of oxygenate to be added must be such that the resulting California gasoline has a range of oxygen content that is identical to the oxygen content PM alternative specification for the final blend. For a final blend of CARBOB that is reported as an alternative formulation in accordance with section 2266(c), the amount or range of amounts of oxygenate to be added must be such that the resulting California gasoline has an amount or range of oxygen content that is identical to the oxygen content alternative specification identified in the certification order for the formulation;

~~(D)~~(F) The estimated volume of the final blend of CARBOB, and of the California gasoline that will result when the minimum specified amount of oxygenate is added to the final blend of CARBOB. A producer or importer may revise the reported estimated volume, as long as notification of the revised volume is received by the executive officer no later than 48 hours after completion of the physical transfer of the final blend from the production or import facility. If notification of the revised volume is not timely received by the executive officer, the reported estimated volume shall be deemed the reported actual volume.

(2) Applicability of notification to subsequent final blends. The notification a producer or importer provides pursuant to section (b)(1) for a final blend of CARBOB shall apply to all subsequent final blends of CARBOB or California gasoline supplied by the producer or importer from the same production or import facility until the producer or importer designates a final blend at that facility as either (A) California gasoline rather than CARBOB, or (B) CARBOB subject to a new notification made pursuant to section (b)(1).

~~(2)~~(3) If, through no intentional or negligent conduct, a producer or importer cannot report within the time period specified in (b)(1) above, the producer or importer may notify the executive officer of the required data as soon as reasonably possible and may provide a written explanation of the cause of the delay in reporting. If, based on the written explanation and the surrounding circumstances, the executive officer determines that the conditions of this section ~~(b)(2)(3)~~ have been met, timely notification shall be deemed to have occurred.

~~(3)~~(4) The executive officer may enter into a written protocol with any individual producer or importer for the purpose of specifying how the requirements in section (b)(1) shall be applied to the producer's or importer's particular operations, as long as the executive officer reasonably determines that application of the regulatory requirements under the protocol is not less stringent or enforceable than application of the express terms of section (b)(1). Any such protocol shall include the producer's or importer's agreement to be bound by the terms of the protocol.

(c) Sampling, testing and recordkeeping by producers and importers of CARBOB.

(1) Each producer of CARBOB shall sample and test for the sulfur, aromatic hydrocarbon, olefin, oxygen and benzene content, T50, T90, and, during the regulatory control periods identified in section 2262.4(a)(2) and (b)(2), the Reid vapor pressure, of each final blend

of CARBOB that the producer has produced, by collecting and analyzing a representative sample of CARBOB taken from the final blend, ~~in accordance with section (a).~~ A producer who is electing to use the CARBOB model in determining compliance shall analyze the CARBOB without adding oxygenate. In all other cases, the producer or importer shall oxygenate and analyze the CARBOB in accordance with section (a)(2)(C). If a producer blends CARBOB directly to pipelines, tankships, railway tankcars or trucks and trailers, the loading(s) shall be sampled and tested by the producer or authorized contractor.

- (2) Each importer of CARBOB shall sample and test for the sulfur, aromatic hydrocarbon, olefin, oxygen and benzene content, T50, T90, and, during the regulatory control periods identified in section 2262.4(a)(2) and (b)(2), the Reid vapor pressure, of each ~~shipment~~ final blend of CARBOB which the importer has imported by tankship, pipeline, railway tankcars, trucks and trailers, or other means, by collecting and analyzing a representative sample of CARBOB taken from the ~~shipment final blend at its import facility, in accordance with section (a).~~ An importer who is electing to use the CARBOB model in determining compliance shall analyze the CARBOB without adding oxygenate. In all other cases, the importer shall oxygenate and analyze the CARBOB in accordance with section (a)(2)(C). *[The change from “shipment” to “final blend” is intended to make sure that the batch being sampled is the same as the batch to which the standards will apply. The same change may be proposed for the CaRFG sampling sections in section 2270.]*
- (3) Each producer or importer required to sample and analyze a final blend ~~or shipment~~ of CARBOB pursuant to this section (c) shall maintain, for two years from the date of each sampling, records showing the sample date, identify of blend or product sampled, container or other vessel sampled, the final blend ~~or shipment~~ volume, and the sulfur, aromatic hydrocarbon, olefin, oxygen and benzene content, T50, T90, and Reid vapor pressure as determined in accordance with section (a)(2). All CARBOB produced or imported by the producer or importer and not tested as required by this section shall be deemed to have a Reid vapor pressure, sulfur, aromatic hydrocarbon, olefin, oxygen and benzene content, T50 and T90 exceeding the applicable flat limit or averaging limit standards specified in section 2262, unless the importer demonstrates that the CARBOB meets those standards and limit(s).
- (4) A producer or importer shall provide to the executive officer any records required to be maintained by the producer or importer pursuant to this section (c) within 20 days of a written request from the executive officer if the request is received before expiration of the period during which the records are required to be maintained. Whenever a producer or importer fails to provide records regarding a final blend or shipment of CARBOB in accordance with the requirements of this section, the final blend ~~or shipment~~ of CARBOB shall be presumed to have been sold by the producer or importer in violation of the applicable flat limit or averaging limit standards and compliance requirements in sections 2262, 2262.3(b) or (c), 2262.4(b), or 2262.5(c), unless the importer demonstrates that the CARBOB meets those standards and limit(s).

- (5) The executive officer may enter into a protocol with any producer or importer for the purpose of specifying alternative sampling, testing, recordkeeping, or reporting requirements which shall satisfy the provisions of sections (c)(1) or (c)(2). The executive officer may only enter into such a protocol if s/he reasonably determines that application of the regulatory requirements under the protocol will be consistent with the state board's ability effectively to enforce the provisions of sections 2262, 2262.3(b) or (c), 2262.4(b), or 2262.5(c), and the PM averaging limit(s). Any such protocol shall include the producer's or importer's agreement to be bound by the terms of the protocol.

(d) *Documentation required when CARBOB is transferred.*

- (1) On each occasion when any person transfers custody or title of CARBOB, the transferor shall provide the transferee a document that prominently:
- (A) states that the CARBOB does not comply with the standards for California gasoline without the addition of oxygenate, and
 - (B) identifies, consistent with the notification made pursuant to section (b), the oxygenate type or types and amount or range of amounts that must be added to the CARBOB to make it comply with the standards for California gasoline. Where the producer or importer of the CARBOB has elected to specify the properties of the oxygenate pursuant to section (b)(1)(D), the document must also prominently identify the maximum permitted sulfur, benzene, olefin and aromatic hydrocarbon contents — not to exceed the maximum levels in the section (b)(1)(D) notification — of the oxygenate to be added to the CARBOB.
- (2) A pipeline operator may comply with this requirement by the use of standardized product codes on pipeline tickets, where the code(s) specified for the CARBOB is identified in a manual that is distributed to transferees of the CARBOB and that sets forth all of the required information for the CARBOB.

(e) *Restrictions on transferring CARBOB.*

- (1) No person may transfer ownership or custody of CARBOB to any other person unless the transferee has agreed in writing with the transferor that either:
- (A) The transferee is a registered oxygenate blender and will add oxygenate of the type(s) and amount (or within the range of amounts) designated in accordance with section (b) before the CARBOB is transferred from a final distribution facility, or
 - (B) The transferee will take all reasonably prudent steps necessary to assure that the CARBOB is transferred to a registered oxygen blender who adds the type and amount (or within the range of amounts) of oxygenate designated in accordance with section (b) to the CARBOB before the CARBOB is transferred from a final distribution facility.

- (2) No person may sell or supply CARBOB from a final distribution facility where the type and amount or range of amounts of oxygenate designated in accordance with section (b) has not been added to the CARBOB.

(f) *Restrictions on blending CARBOB with other products.*

- (1) No person may combine any CARBOB that has been supplied from the facility at which it was produced or imported with any other CARBOB, gasoline, blendstock or oxygenate, except:
 - (A) Oxygenate of the type and amount (or within the range of amounts) specified by the producer or importer at the time the CARBOB was supplied from the production or import facility, or
 - (B) Other CARBOB for which the same oxygenate type and amount (or range of amounts) was specified by the producer or importer at the time the CARBOB was supplied from the production or import facility.
- (2) Notwithstanding section (f)(1), the executive officer may enter into a written protocol with any person to identify conditions under which the person may lawfully combine CARBOB with California gasoline or other CARBOB during a changeover in service of a storage tank for a legitimate operational business reason. The executive officer may only enter into such a protocol if he or she reasonably determines that commingling of the two products will be minimized as much as is reasonably practical. Any such protocol shall include the person's agreement to be bound by the terms of the protocol.

(g) *Requirements for oxygenate blenders.*

(1) *Registration and Certification.*

- (A) Any oxygen blender must register with the executive officer by March 1, 1996, or at least 20 days before blending oxygenates with CARBOB, whichever occurs later. Thereafter, a oxygenate blender must register with the executive officer annually by January 1. The registration must be addressed to the attention of the Chief, Compliance Division, California Air Resources Board, P.O. Box 2815, Sacramento, CA, 95812.
- (B) The registration must include the following:
 1. The oxygen blender's contact name, telephone number, principal place of business which shall be a physical address and not a post office box, and any other place of business at which company records are maintained.
 2. For each of the oxygen blender's oxygenate blending facilities, the facility name, physical location, contact name, and telephone number.

(C) The executive officer shall provide each complying oxygen blender with a certificate of registration compliance no later than June 30. The certification shall be effective from no later than July 1, through June 30 of the following year. The certification shall constitute the oxygen blender's certification pursuant to Health and Safety Code section 43021.

(D) Any oxygen blender must submit updated registration information to the executive officer at the address identified in section ~~(h)~~(g)(1)(A) within 30 days of any occasion when the registration information previously supplied becomes incomplete or inaccurate.

(2) ***Requirement to add oxygenate to CARBOB.*** Whenever an oxygenate blender receives CARBOB from a transferor to whom the oxygenate blender has represented that he/she will add oxygenate to the CARBOB, the oxygenate blender must add to the CARBOB oxygenate of the type(s) and amount (or within the range of amounts) identified in the documentation accompanying the CARBOB. If the documentation identifies the permitted maximum sulfur, benzene, olefin and aromatic hydrocarbon contents of the oxygenate, the oxygenate blender must add an oxygenate that does not exceed the maximum permitted levels.

(3) ***Additional requirements for terminal blending.*** Any oxygenate blender who makes a final blend of California reformulated gasoline by blending any oxygenate with any CARBOB in any gasoline storage tank, other than a truck used for delivering gasoline to retail outlets or bulk purchaser-consumer facilities, shall, for each such final blend, determine the oxygen content and volume of the final blend prior to its leaving the oxygen blending facility, by collecting and analyzing a representative sample of gasoline taken from the final blend, using methodology set forth in section 2263.

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[No changes to 2266.5(h)-(i).]

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Add section 2262.9, title 13, California Code of Regulations, to read as follows:

Section 2262.9. Requirements Regarding Denatured Ethanol Intended For Use as an Additive in California Gasoline

(a) Standards.

(1) Standard for denatured ethanol. Starting December 31, 2002, no person shall sell, offer for sale, supply or offer for supply denatured ethanol intended for blending with CARBOB or California gasoline that has:

- (A) A sulfur content exceeding 10 parts per million;
- (B) A benzene content exceeding 0.1 percent by volume; or
- (C) An olefins content exceeding 0.1 percent by volume; or
- (D) An aromatic hydrocarbon content exceeding 1.7 percent by volume.

(2) **Standard for products represented as appropriate for use as a denaturant in ethanol.**

Starting December 31, 2002, no person shall sell, offer for sale, supply or offer for supply a product represented as appropriate for use as a denaturant in ethanol intended for blending with CARBOB or California gasoline, if the denaturant has:

- (A) An aromatic hydrocarbon content exceeding 35 percent by volume;
- (B) A benzene content exceeding 0.1 percent by volume; or
- (C) An olefins content exceeding 0.1 percent by volume; or
- (D) A sulfur content exceeding 60 parts per million (through March 31, 2005) or 30 parts per million (after March 31, 2005).

(b) **Test Methods.** In determining compliance with the standards in this section,

- (1) The sulfur content of denatured ethanol shall be determined by **[Insert reference to method]**.
- (2) The aromatic hydrocarbon, benzene and olefins content of denatured ethanol shall be determined by sampling the denaturant and using the methods specified in section 2263 to determine the content of those compounds in the denaturant, and then multiplying the result by 0.048.
- (3) The sulfur, aromatic hydrocarbon, benzene and olefins content of the denaturant shall be determined by the methods specified in section 2263 for determining the content of those compounds in gasoline.

(c) **Documentation required for the transfer of denatured ethanol intended for use as an additive in California gasoline.**

- (1) On each occasion when any person transfers custody or title of denatured ethanol intended for use as an additive in California gasoline, the transferor shall provide the transferee a document that prominently states that the denatured ethanol complies with the standards for denatured ethanol intended for use as an additive in California gasoline.
- (2) Any person who sells or supplies denatured ethanol intended for use as an additive in California gasoline from the California facility at which it was imported or produced, or

who produces it in California, shall provide the purchaser or recipient a document that identifies:

(A) The name and address of the person selling or supplying the denatured ethanol;

(B) The name and location of the facility(ies) at which the ethanol was produced and at which the denaturant was added to the ethanol;

(C) The name and address of the person(s) who produced the ethanol and who added the denaturant to the ethanol;

(D) The nature of the denaturant (e.g. CaRFG Phase 3 or alkylate) and the source of the denaturant.

NOTE: Authority cited: sections 39600, 39601, 43013, 43013.1, 43018, and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 43000, 43013, 43013.1, 43016, 43018, 43101, and 43830.8, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

**B. AMENDMENTS TO THE DIESEL AROMATICS REGULATION TO PROVIDE
FOR OFFSETS FOR EXCESS EMISSIONS FROM SMALL REFINER CaRFG3**

Amend section 2282(e), title 13, California Code of Regulations, to read as follows:

Section 2282. Aromatic Hydrocarbon Content of Diesel Fuel

* * * *

(e) *Small Refiner Diesel Fuel.*

- (1) The provisions of subsection (a)(1)(A), (B) and (C) shall not apply to the diesel fuel that is produced by a small refiner at the small refiner's California refinery and that is first consecutively supplied from the refinery as vehicular diesel fuel in each calendar year, up to the small refiner's exempt volume (up to one quarter of the small refiner's exempt volume for the period from October 1, 1993-December 31, 1993). Diesel fuel which is designated by the small refiner as not exempt under this section (e), and which is reported to the executive officer pursuant to a protocol entered into between the small refiner and the executive officer, shall not be counted against the exempt volume and shall not be exempt under this subsection (e). This exemption shall not apply to any diesel fuel supplied from a small refiner's refinery in any calendar quarter in which less than 25 percent of the diesel fuel supplied from the refinery was produced from the distillation of crude oil at the refinery. The foregoing notwithstanding, in the case of any small refiner that pursuant to subsection (a)(4) has not been subject to subsection (a)(1) until October 1, 1994, all vehicular diesel fuel produced by the small refiner at the small refiner's California refinery and supplied from the refinery from October 1, 1994 through December 31, 1994, shall be exempt from the provisions of subsection (a)(1)(A), (B) and (C), up to the quarterly volume limits imposed by the executive officer in connection with issuance of suspension orders pursuant to section 2281(g). These quarterly volume limits are as follows: Kern Oil & Refining, 714,100 barrels; Paramount Petroleum, 1,064,700 barrels; and Powerine Oil Company, 1,419,600 barrels.
- (2) To qualify for an exemption under this subsection (e), a refiner shall submit to the executive officer an application for exemption executed in California under penalty of perjury, on the Air Resources Board's ARB/SSD/CPB Form 89-9-1, for each of the small refiner's California refineries. The application shall specify the crude oil capacity of the refinery at all times since January 1, 1978, the crude oil capacities of all the refineries in California and the United States which are owned or controlled by, or under common ownership or control with, the small refiner since September 1, 1988, data demonstrating that the refinery has the capacity to produce liquid fuels by distilling petroleum, and copies of the reports made to the California Energy Commission as required by the Petroleum Industry Reporting Act of 1980 (Public Resources Code sections 25350 et seq.) showing the annual production volumes of distillate fuel at the small refiner's California refinery for 1983 through 1987. Within 90 days of receipt of the application, the executive officer shall grant or deny the exemption in writing. The exemption shall be granted if the executive officer determines that the applicant has demonstrated that s/he meets the provisions of subsection (b)(19), and shall identify the small refiner's exempt volume. The

exemption shall immediately cease to apply at any time the refiner ceases to meet the definition of small refiner in subsection (b)(19).

(3) In addition to the requirements of subsection (f) below, each small refiner who is covered by an exemption shall submit to the executive officer reports containing the information set forth below for each of the small refiner's California refineries. The reports shall be executed in California under penalty of perjury, and must be received within the time indicated below:

(A) The quantity, ASTM grade, aromatic hydrocarbon content, and batch identification of all diesel fuel, produced by the small refiner, that is supplied from the small refinery in each month as vehicular diesel fuel, within 15 days after the end of the month;

(B) For each calendar quarter, a statement whether 25 percent or more of the diesel fuel transferred from the small refiner's refinery was produced by the distillation of crude oil at the small refiner's refinery, within 15 days after the close of such quarter;

(C) The date, if any, on which the small refiner completes transfer from its small refinery in a calendar year of the maximum amount of vehicular diesel fuel which is exempt from subsection (a)(1)(A) and (B) pursuant to subsection (e), within 5 days after such date;

(D) Within 10 days after project completion, any refinery addition or modification which would affect the qualification of the refiner as a small refiner pursuant to subsection (b)(19); and

(E) Any change of ownership of the small refiner or the small refiner's refinery, within 10 days after such change of ownership.

(4) Whenever a small refiner fails to provide records identified in subsection(e)(3)(A) or (B) in accordance with the requirements of those subsections, the vehicular diesel fuel supplied by the small refiner from the small refiner's refinery in the time period of the required records shall be presumed to have been sold or supplied by the small refiner in violation of section (a)(1)(A).

(5) Offsetting Excess Emissions From Gasoline Subject to the Small Refiner CaRFG Phase 3 Standards.

(A) **Annual elections.** At least 30 days before each calendar year starting with 2003, a small refiner who is also a qualifying small refiner as defined in the CaRFG regulations (section 2260(a)(28.5)) may make the following elections:

1. Whether the small refiner elects to produce gasoline subject to the small refiner CaRFG Phase 3 standards in section 2272(a) in the coming year;

2. If electing to produce small refiner CaRFG Phase 3, whether the refiner elects the option of accepting a reduced exempt volume in the coming year to offset the excess emissions;
3. If electing to produce small refiner CaRFG Phase 3 but not to accept a reduced exempt volume, the refiner must elect for the coming year either (i) to produce offset small refiner diesel fuel with an exempt volume determined in accordance with section (b)(4), or (ii) to produce cleaner offset small refiner diesel fuel with an exempt volume expanded by 25 percent and restrictions on sales of high-aromatics California nonvehicular diesel fuel.

(B) Effect of election.

1. **Election not to produce small refiner CaRFG Phase 3.** If a small refiner does not elect to produce gasoline subject to the small refiner CaRFG Phase 3 standards for a particular year, no gasoline sold or supplied from the small refiner's refinery in that year will qualify for the small refiner CaRFG Phase 3 standards in section 2272(a).
2. **Election to accept a reduced exempt volume for small refiner diesel fuel.** If a small refiner elects to accept a reduced exempt volume under section (f)(5)(A), the Executive Officer shall assign a substitute exempt volume for the year that is reduced sufficiently to offset the excess emissions of hydrocarbons, oxides of nitrogen, and potency-weighted toxics that would result from production of the small refiner's full qualifying volume of gasoline subject to the CaRFG Phase 3 standards. In the case of Kern Oil and Refining Co., its reduced exempt volume of small refiner diesel fuel would be 825,995 barrels per year (equivalent to 2263 bpd) in place of 2,337,825 barrels per year (equivalent to 6405 bpd).
3. **Election to retain the preexisting exempt volume and produce offset small refiner diesel fuel.** If the small refiner elects to be subject to the exempt volume determined in accordance with section (b)(4), the Executive Officer shall *[Insert generic language on what adjustments are needed to aromatics and cetane of alt. formulations]*. In the case of Kern Oil and Refining Co., its exempt volume for the year would be 2,337,825 barrels per year (equivalent to 6405 bpd). Any small refiner diesel fuel it sells or supplies as a certified alternative formulation equivalent to a 20 percent aromatics reference fuel must have an aromatic hydrocarbon content that is 2 percentage points lower, and a cetane number that is 0.7 higher, than is specified for the alternative formulation. Any small refiner diesel fuel it sells or supplies which is not designated as a certified alternative formulation must have an aromatic hydrocarbon content not exceeding 18 percent.
4. **Election of expanded exempt volume with requirement for cleaner offset small refiner diesel fuel.** If the small refiner elects to produce offset small refiner diesel fuel with an expanded exempt volume, its exempt volume for the year will be 125 percent of its exempt volume determined in accordance with section (b)(4).

[Insert generic language on what adjustments are needed to aromatics and cetane of alt. formulations] The small refiner will be prohibited during the year from selling or supplying diesel fuel that it has produced and is intended for nonvehicular applications in California unless the fuel is treated as vehicular diesel fuel for all compliance purposes under section 2282. In the case of Kern Oil and Refining Co., its exempt volume for the year would be 2,922,190 barrels per year (equivalent to 8006 bpd). Any small refiner diesel fuel it sells or supplies in the year as a certified alternative formulation equivalent to a 20 percent aromatics reference fuel must have an aromatic hydrocarbon content that is 4.5 percentage points lower, and a cetane number that is 0.5 higher, and an additive content that is 0.02 percentage higher, than is specified for the alternative formulation. Any small refiner diesel fuel it sells or supplies which is not designated as a certified alternative formulation shall have an aromatic hydrocarbon content not exceeding 14 percent.

5. Additional requirement to sell or supply ultra-low sulfur diesel fuel. In addition to the requirements in section (f)(5)(B)1. through (f)(5)(B)4., a small refiner that elects to produce gasoline subject to the CaRFG Phase 3 standards for a year must sell or supply in that year up to 300 bpd of diesel fuel having a sulfur content not exceeding 30 ppm and an aromatic hydrocarbon content not exceeding 20 percent, to the extent there are buyers wishing to acquire that diesel fuel on commercially reasonable terms.

(C) Early opt-in to produce small refiner CaRFG Phase 3. To the extent that the sale of supply of gasoline subject to the CaRFG Phase 3 standards before December 31, 2002 is permitted by section 2261(b)(3), a qualifying small refiner may elect to have to option of producing gasoline subject to the small refiner CaRFG Phase 3 standards for a full year or the remainder of a year prior to December 31, 2002. In that case, section (e)(5)(B)2.-5. would apply on a pro rata basis to the portion of the year on and after the effective date of the election, and the preexisting requirements would apply on a pro rata basis to the portion of the year prior to the effective date of the election.

[Note: under this approach, once a small refiner elects to produce gasoline subject to the small refiner CaRFG3 standards, it may produce up to its full “qualifying volume” to that standard each year. The amount of small refiner CaRFG3 actually produced has no effect on the small refiner’s obligations regarding diesel fuel — all of its diesel fuel sold or supplied in the year would be subject to the offset small refiner diesel fuel limits and revised “exempt volume.” Similarly, the small refiner incurs no obligation to produce a minimum volume of offset small refiner diesel fuel under either offset scenario; to the extent that less than the permitted exempt volume is produced, the shortfall will be made up with 10% aromatics-equivalent diesel fuel produced by other refiners. However, it does for the full year incur the obligations regarding ultra-low sulfur diesel fuel and diesel fuel intended for nonvehicular uses in California.]

Amend section 2272(c)(5), title 13, California Code of Regulations, as follows:

Section 2272. CaRFG Phase 3 Standards for Qualifying Small Refiners.

* * * *

(c) ***Criteria for qualifying gasoline.*** Gasoline shall only be subject to treatment under this section if the small refiner demonstrates all of the following:

* * * *

- (5) The excess emissions of hydrocarbons, oxides of nitrogen, and potency-weighted toxics are offset pursuant to section 2282, title 13, California Code of Regulations. The excess emissions from gasoline subject to the small refiner CaRFG Phase 3 standards are: 0.0206 pounds of exhaust hydrocarbons per barrel, 0.0322 pounds of oxides of nitrogen per barrel, and the potency-weighted toxic emissions equivalent of 0.0105 pounds of benzene per barrel. ~~(Note: At the time this section 2272(d)(5) was adopted in June 2000, section 2282 did not include a mechanism for offsetting excess emissions from gasoline subject to the small refiner CaRFG Phase 3 standards. As such, a qualifying small refiner accordingly may not elect to have its gasoline subject to the small refiner CaRFG Phase 3 standards until section 2282 is amended to provide a mechanism for offsetting the excess emissions and those amendments become operative. The Air Resources Board intends to consider such amendments in a Fall 2000 rulemaking.)~~

* * * *

NOTE: Authority cited: sections 39600, 39601, 43013, 43018, and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 40000, 43016, 43018, and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

C. MISCELLANEOUS CORRECTIONS AND IMPROVEMENTS TO THE CaRFG3 REGULATIONS.

1. Correction to provision on transitions to winter oxygen season for low-throughput service stations.

Amend section 2262.5(e)(2), title 13, California Code of Regulations as follows:

Section 2262.5. Compliance With the Standards for Oxygen Content.

(a) *Compliance with the minimum oxygen content cap limit standard in specified areas in the wintertime.*

(1) Within the areas and periods set forth in section (a)(2), no person shall sell, offer for sale, supply, offer for supply, or transport California gasoline unless it has an oxygen content of not less than the minimum oxygen content cap limit in section 2262.

(2) (A) *November 1 through February 29 (of any year) and October 1 through October 31 (in 1996 through 2002):*

South Coast Area

(B) *October 1, 1998 through January 31, 1999 and October 1, 1999 through January 31, 2000:*

Fresno County

Madera County

(C) *October 1, 1998 through January 31, 1999:*

Lake Tahoe Air Basin

(D) *November 1 through February 29 (of any year):*

Imperial County

* * * *

(e) *Application of prohibitions.*

(1) Section (a) shall not apply to a transaction occurring in the areas and periods shown in (a)(2) where the person selling, supplying, or offering the gasoline demonstrates as an affirmative defense that, prior to the transaction, he or she has taken reasonably prudent precautions to assure that the gasoline will not be delivered to a retail service station or bulk purchaser-consumer's fueling facility in the areas and periods shown in (a)(2).

(2) (A) Section (a) shall not apply to a transaction occurring in the South Coast Air Basin in October 2000, 2001, or 2002, where the transaction involves the transfer of gasoline from a stationary storage tank to a motor vehicle fuel tank and the person selling, supplying, or offering the gasoline demonstrates as an affirmative defense that the last

delivery of gasoline to the stationary storage tank occurred no later than September 16 of that year.

(B) Section (a) shall not apply to a transaction occurring in ~~an area shown in (a)(2) in~~ November either in Imperial County or, starting in 2003, in the South Coast Control Area where the transaction involves the transfer of gasoline from a stationary storage tank to a motor vehicle fuel tank and the person selling, supplying, or offering the gasoline demonstrates as an affirmative defense that the last delivery of gasoline to the stationary storage tank occurred no later than October 17 of that year.

NOTE: Authority cited: sections 39600, 39601, 43013, 43013.1, 43018, and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 43000, 43013, 43013.1, 43016, 43018, 43101, and 43830.8, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

[This corrects a drafting error in the CaRFG3 amendments.]

2. Racing fuel exemption from detergent additives requirements.

Amend section 2261(f) to read as follows:

Section 2261. Applicability of Standards; Additional Standards.

* * * *

(f) This subarticle 2, section 2253.4 (Lead/Phosphorus in Gasoline), ~~and~~ section 2254 (Manganese Additive Content), and section 2257 (Required Additives in Gasoline) shall not apply to gasoline where the person selling, offering or supplying the gasoline demonstrates as an affirmative defense that the person has taken reasonably prudent precautions to assure that the gasoline is used only in racing vehicles.

NOTE: Authority cited: sections 39600, 39601, 43013, 43013.1, 43018, and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 43000, 43013, 43013.1, 43016, 43018, 43101, and 43830.8, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

[This subsection has reflected the ARB's longstanding interpretation that, since racing vehicles are exempted by Health and Safety Code section 43001(a) from the vehicular air pollution control statutes, fuel used in racing vehicles is exempt from the ARB's motor vehicle fuels regulations. The proposed amendment corrects an oversight omitting the detergent additives regulation from the exclusion]

3. Correction of Title of Section 2262.3

Amend the title of section 2262.3, title 13, California Code of Regulations as follows:

Section 2262.3 Compliance With the CaRFG Phase 2 and CaRFG Phase 3 Standards for Sulfur, Benzene, Aromatic Hydrocarbons, Olefins, T50, and T90 and ~~DI~~.

* * * *

NOTE: Authority cited: sections 39600, 39601, 43013, 43013.1, 43018, and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 43000, 43013, 43013.1, 43016, 43018, 43101, and 43830.8, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

4. Correction of provisions in Sampling Procedures on tap sampling to accurately reflect ASTM D 270

Amend section 2296(k)(2), title 13, California Code of Regulations, as follows:

§ 2296. Motor Fuel Sampling Procedures.

* * * *

(k) "Sampling procedures."

* * * *

(2) "Tap sampling." The tap sampling procedure is applicable for sampling liquids of 26 pounds (1.83 kgf/cm²) RVP or less in tanks which are equipped with suitable sampling taps or lines. This procedure is recommended for volatile stocks in tanks of the breather and balloon roof type, spheroids, etc. (Samples may be taken from the drain cocks of gage glasses, if the tank is not equipped with sampling taps.) When obtaining a sample for RVP distillation analysis, use the assembly as shown in Figure 3. When obtaining a sample for other than RVP or distillation analysis, the assembly as shown in Figure 3 need not be provided.

NOTE: If RVP is more than 16 pounds (1.12 kgf/cm²) but not more than 26 pounds (1.83 kgf/cm²) a cooling bath as shown in section (l)(6), Figure 5, shall be used between the tank tap and the sample container to cool the sample and prevent volatilization of low-boiling components.

* * * *

NOTE: Authority cited: sections 39600, 39601, 43013, 43013.1, 43018, 43101 and 43830, Health and Safety Code. Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 41511, 43000, 43013, 43018, 43101, and 43830, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

5. Change the reproducibility of the automated RVP test methods.

Amend section 2297(k), title 13, California Code of Regulations, to read as follows:

§ 2297. Test Method for the Determination of the Reid Vapor Pressure Equivalent Using an Automated Vapor Pressure Test Instrument.

* * * *

(k) *Precision and Bias*

(1.0) **Precision** — The precision of this test method as determined by the statistical examination of interlaboratory test results is as follows:

(1.1) **Repeatability** — The difference between successive test results obtained by the same operator with the same apparatus under constant operating conditions on identical test material would, in the long run, in the correct operation of the test method exceed the following value only in one case in twenty. The repeatability values for the specific automated vapor pressure test instruments listed in section (i)(1.0) ~~were equal to or less than 0.2 psi. For the purposes of determining compliance with sections 2251 and 2252.5, the repeatability value for this method shall be 0.20 psi.~~ are:

<u>1. Grabner Instruments,</u>	
<u>Model: CCA-VP (laboratory Grabner)</u>	<u>0.84 psi</u>
<u>2. Grabner Instruments,</u>	
<u>Model: CCA-VPS (portable Grabner)</u>	<u>0.84 psi</u>
<u>3. Stanhope-Seta Limited</u>	
<u>Model: Setavap</u>	<u>0.102 psi</u>

(1.2) **Reproducibility** — The difference between two single and independent test results obtained by different operators working in different laboratories using the same make and model test instrument on identical test material would, in the long run, in the correct operation of the test method exceed the following value only in one case in twenty. The reproducibility values for the specific automated vapor pressure test instruments listed in section (i)(1.0) ~~were equal to or less than 0.3 psi. For the purposes of determining compliance with sections 2251 and 2252.5, the repeatability value for this method shall be 0.30 psi.~~ are:

<u>1. Grabner Instruments,</u>	
<u>Model: CCA-VP (laboratory Grabner)</u>	<u>0.13 psi</u>
<u>2. Grabner Instruments,</u>	
<u>Model: CCA-VPS (portable Grabner)</u>	<u>0.21 psi</u>
<u>3. Stanhope-Seta Limited</u>	
<u>Model: Setavap</u>	<u>0.32 psi</u>

(2.0) **Bias** — A relative bias was observed between the total pressure obtained using this test method and the Reid vapor pressure obtained using ASTM Test Method D323-58. This bias is corrected by the use of the calibration equation in section (i)(1.0) which calculates a Reid vapor pressure equivalent value from the observed total pressure.

NOTE: Authority cited: sections 39600, 39601, 43013, 43018, and 43101, and 43830, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). Reference: sections 39000, 39001, 39002, 39003, 39500, 43000, 43013, 43018, 43101, and 43830, Health and Safety Code; and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).