### FINAL REGULATION ORDER

## 2004 AMENDMENTS REFINING THE CALIFORNIA PHASE 3 REFORMULATED GASOLINE REGULATIONS

**Note:** The amendments are shown in <u>underline</u> to indicate additions and <u>strikeout</u> to indicate deletions. The symbol "\* \* \* \* \*" means that intervening text not being amended is not shown. Subsection headings are shown in italics rather than bold italics, **AND ARE TO BE ITALICIZED IN BARCLAYS CALIFORNIA CODE OF REGULATIONS.** Underlined italicized headings correct publishing errors in Barclays.

## California Code of Regulations, Title 13, Division 3 Chapter 5. Standards for Motor Vehicle Fuels Article 1. Standards for Gasoline

Subarticle 2. Standards for Gasoline Sold Beginning March 1, 1996

#### Section 2260. Definitions.

(a) For the purposes of this subarticle, the following definitions apply:

\* \* \* \* \*

(16) "Import facility" means the <u>facility at storage tank to</u> which imported California gasoline or CARBOB is first <u>received delivered</u> in California, including, in the case of gasoline or CARBOB imported by cargo tank and delivered directly to a facility for dispensing gasoline into motor vehicles, the cargo tank in which the gasoline or CARBOB is imported.

\* \* \* \* \*

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, 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).

\* \* \* \* \*

#### Section 2262. The California Reformulated Gasoline Phase 2 and Phase 3 Standards.

The CaRFG Phase 2 and CaRFG Phase 3 standards are set forth in the following table. For all properties but Reid vapor pressure (cap limit only) and oxygen content, the value of the regulated property must be less than or equal to the specified limit. With respect to the Reid vapor pressure cap limit and the oxygen content flat and cap limit, the limits are expressed as a range, and the Reid vapor pressure and oxygen content must be less than or equal to the upper limit, and more than or equal to the lower limit. A qualifying small refiner may comply with the small refiner CaRFG Phase 3 standards, in place of the CaRFG Phase 3 standards in this section, in accordance with section 2272.

Amendments as adopted 11/18/04

The California Reformulated Gasoline Phase 2 and Phase 3 Standards

| Property  | Flat Limits       |   | Averaging Limits  |                   | Cap Limits             |   |
|---|-------------------|---|-------------------|-------------------|------------------------|---|
|   | CaRFG<br>Phase 2  | CaRFG<br>Phase 3                            | CaRFG<br>Phase 2  | CaRFG<br>Phase 3  | CaRFG<br>Phase 2       | CaRFG<br>Phase 3                            |
| Reid Vapor Pressure <sup>1</sup> (pounds per square inch)                     | 7.00              | 7.00 or 6.90 <sup>2</sup>                   | Not<br>Applicable | Not<br>Applicable | $7.00^{3}$             | 6.40 -<br>7.20                              |
| Sulfur Content  | 40                | 20  | 30                | 15                | 80                     | $60^{4}$                                    |
| (parts per million by<br>weight)  |                   |   |                   |                   |                        | $30^{4}$                                    |
| Benzene Content (percent by volume)   | 1.00              | 0.80  | 0.80              | 0.70              | 1.20                   | 1.10  |
| Aromatics Content (percent by volume)   | 25.0              | 25.0  | 22.0              | 22.0              | $30.0^3$               | 35.0  |
| Olefins Content<br>(percent by volume)  | 6.0               | 6.0   | 4.0               | 4.0               | 10.0                   | 10.0  |
| T50 (degrees Fahrenheit)  | 210               | 213   | 200               | 203               | 220                    | 220   |
| T90 (degrees Fahrenheit)  | 300               | 305   | 2905              | 295               | 330                    | 330   |
| Oxygen Content (percent by weight)  | 1.8 - 2.2         | 1.8 - 2.2                                   | Not<br>Applicable | Not<br>Applicable | 1.8 <sup>6</sup> - 3.5 | $1.8^6 - 3.5^7$                             |
|   |                   |   |                   |                   | $0^6$ - 3.5            | $0^6 - 3.5^7$                               |
| Methyl tertiary-butyl<br>ether (MTBE) and<br>oxygenates other than<br>ethanol | Not<br>Applicable | Prohibited<br>as<br>provided in<br>§ 2262.6 | Not<br>Applicable | Not<br>Applicable | Not<br>Applicable      | Prohibited<br>as<br>provided in<br>§ 2262.6 |

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

The 6.90 pounds per square inch (psi) flat limit applies only when a producer or importer is using the evaporative emissions model element of the CaRFG Phase 3 Predictive Model, in which case all predictions for evaporative emissions increases or decreases made using the evaporative emissions model are made relative to 6.90 psi and the gasoline may not exceed the maximum RVP cap limit of 7.20 psi. Where the evaporative emissions model element of the CaRFG Phase 3 Predictive Model is not used, the RVP of gasoline sold or supplied from the production or import facility may not exceed 7.00 psi.

For sales, supplies, or offers of California gasoline downstream of the production or import facility starting on the date on which early compliance with the CaRFG Phase 3 standards is permitted by the executive officer under

- section 2261(b)(3), the CaRFG Phase 2 cap limits for Reid vapor pressure and aromatics content shall be 7.20 psi and 35.0 percent by volume respectively.
- The CaRFG Phase 3 sulfur content cap limits of 60 and 30 parts per million are phased in starting December 31, 2003, and December 31, 2005, respectively, in accordance with section 2261(b)(1)(A).
- 5 Designated alternative limit may not exceed 310.
- The 1.8 percent by weight minimum oxygen content cap only applies during specified winter months in the areas identified in section 2262.5(a).
- If the gasoline contains more than 3.5 percent by weight oxygen <u>from ethanol</u> but no more than 10.0 volume percent ethanol, the maximum oxygen content cap is 3.7 percent by weight.

NOTE: Authority cited: sections 39600, 39601, 43013, 43013.1, 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). Reference: sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 43000, 43013, 43013.1, 43016, 43018, 43101, 43830, 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).

\* \* \* \* \*

# Section 2262.4. Compliance With the CaRFG Phase 2 and CaRFG Phase 3 Standards for Reid Vapor Pressure.

- (a) Compliance with the cap limits for Reid vapor pressure.
  - (1) No person shall sell, offer for sale, supply, offer for supply, or transport California gasoline which exceeds the applicable cap limit for Reid vapor pressure within each of the air basins during the regulatory period set forth in section (a)(2).
  - (2) Regulatory Control Periods.
    - (A) April 1 through October 31 (May 1 through October 31 in 2003 and 2004):
       South Coast Air Basin and Ventura County
       San Diego Air Basin
       Mojave Desert Air Basin
       Salton Sea Air Basin
    - (B) May 1 through September 30: Great Basin Valley Air Basin
    - (C) May 1 through October 31:
      San Francisco Bay Area Air Basin
      San Joaquin Valley Air Basin
      Sacramento Valley Air Basin
      Mountain Counties Air Basin

#### Lake Tahoe Air Basin

(D) June 1 through September 30:North Coast Air BasinLake County Air BasinNortheast Plateau Air Basin

(E) June 1 through October 31:

North Central Coast Air Basin

South Central Coast Air Basin (Excluding Ventura County)

- (b) Compliance by producers and importers with the flat limit for Reid vapor pressure.
  - (1) Reid vapor pressure standard for producers and importers.
    - (A)In an air basin during the regulatory control periods specified in section (b)(2), no producer or importer shall sell, offer for sale, supply, or offer for supply from its production facility or import facility California gasoline which has a Reid vapor pressure exceeding the applicable flat limit set forth in section 2262 unless the gasoline has been reported as a PM alternative gasoline formulation pursuant to section 2265(a) using the evaporative emissions model element of the CaRFG Phase 3 Predictive Model.
    - (B)In an air basin during the regulatory control periods specified in section (b)(2), no producer or importer shall sell, offer for sale, supply, or offer for supply from its production facility or import facility California gasoline which has been reported as a PM alternative gasoline formulation pursuant to section 2265(a) using the evaporative emissions model element of the CaRFG Phase 3 Predictive Model if the gasoline has a Reid vapor pressure exceeding the PM flat limit for Reid vapor pressure in the identified PM alternative specifications.
  - (2) Regulatory control periods for production and import facilities.
    - (A) 1. March 1 through October 31 (Except as otherwise provided in (A)2. and (A)3. below):

South Coast Air Basin and Ventura County San Diego Air Basin Mojave Desert Air Basin Salton Sea Air Basin

2. In the areas identified in section 2262.4(b)(2)(A)1., California gasoline that is supplied March 1 through March 31, 2003 from a production or import facility that is qualified under this subsection is not subject to the prohibitions of section 2262.4(b)(1), as long as the gasoline either is designated as subject to the CaRFG Phase 3 standards, or is subject to

Amendments as adopted 11/18/04

the CaRFG Phase 2 standards and also meets the prohibitions in sections 2262.6(a)(1) and 2262.6(c) regarding the use of oxygenates. In order for a production or import facility to be qualified, the producer or importer must notify the Executive Officer in writing by February 14, 2003 that it has elected to have the facility be subject to this subsection during March 2003.

- 3. In the areas identified in section 2262.4(b)(2)(A)1., California gasoline that is supplied March 1 through March 31, 2004 from a production or import facility that was not qualified under section 2262.4(b)(2)(A)2. is not subject to the prohibitions of section 2262.4(b)(1).
- (B) *April 1 through September 30:* Great Basin Valley Air Basin
- (C) April 1 through October 31: San Francisco Bay Area Air Basin San Joaquin Valley Air Basin Sacramento Valley Air Basin Mountain Counties Air Basin Lake Tahoe Air Basin
- (D) May 1 through September 30:North Coast Air BasinLake County Air BasinNortheast Plateau Air Basin
- (E) May 1 through October 31:North Central Coast Air BasinSouth Central Coast Air Basin (Excluding Ventura County)

6

### (c) Applicability.

- (1) Section (a)(1) shall not apply to a transaction occurring in an air basin during a regulatory control period in section (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 be delivered to a retail service station or bulk purchaser-consumer's fueling facility when the station or facility is not subject to a regulatory control period in section (a)(2).
- (2) Section (b) shall not apply to a transaction occurring in an air basin during the applicable regulatory control period for producers and importers where the person selling, supplying, offering or transporting 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

be delivered to a retail service station or bulk purchaser-consumer's fueling facility located in an air basin not then subject to the regulatory control period for producers and importers set forth in section (b)(2).

- (3) Section (a)(1) shall not apply to a transaction occurring in an air basin during the regulatory control period 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 more than fourteen days before the start of the regulatory control period.
- (4) For purposes of compliance with section 2262.4(b) only, <u>G</u>gasoline that is produced in California, and is <u>then</u> transported to the South Coast Air Basin, Ventura County, or the San Diego Air Basin by marine vessel shall be treated as having been imported at the facility to which the gasoline is off loaded from the marine vessel, shall be subject to the regulatory control periods for production and import facilities identified in section 2262.4(b)(2)(A).

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, 43830, 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).

## 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: South Coast Area Imperial County
    - (B) October 1 through October 31, (1996 through 2002 only): South Coast Area

7

(b) *Compliance with the maximum oxygen content cap limit standard*. No person shall sell, offer for sale, supply, or transport California gasoline which has an oxygen content exceeding the maximum oxygen content cap limit in section 2262, or which has an ethanol content exceeding 10.0 percent by volume.

\* \* \* \* \*

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).

# Section 2262.6. Prohibition of MTBE and Oxygenates Other Than Ethanol in California Gasoline Starting December 31, 2003.

\* \* \* \* \*

- (c) Use of oxygenates other than ethanol or MTBE in California gasoline on or after December 31, 2003.
  - (1) Starting December 31, 2003, no person shall sell, offer for sale, supply or offer for supply California gasoline which has been produced at a California production facility with the use of any oxygenate other than ethanol or MTBE unless a multimedia evaluation of use of the oxygenate in California gasoline has been conducted and the California Environmental Policy Council established by Public Resources Code section 71017 has determined that such use will not cause a significant adverse impact on the public health or the environment.
  - (2) Starting December 31, 2003, no person shall sell, offer for sale, supply or offer for supply California gasoline which contains a total of more than 0.10 weight percent oxygen collectively from all of the oxygenates identified in section (c)(4), other than oxygenates not prohibited by section (c)(1).
  - (3) Starting July 1, 2004, no person shall sell, offer for sale, supply or offer for supply California gasoline which contains a total of more than 0.06 weight percent oxygen collectively from all of the oxygenates identified in section (c)(4), other than oxygenates not prohibited by section (c)(1).
  - (4) *Covered oxygenates*. Oxygen from the following oxygenates is covered by the prohibitions in section 2262.6(c)(1), (2) and (3):

Amendments as adopted 11/18/04

Methanol

Isopropanol

n-Propanol

*n*-Butanol

iso-Butanol

sec-Butanol

tert-Butanol

*Tert*-pentanol (*tert*-amylalcohol)

Ethyl *tert*-butylether (ETBE)

Diisopropylether (DIPE)

*Tert*-amylmethylether (TAME)

- (5) The prohibitions in section 2262.6(c)(1)and (2), and in section 2262.6(c)(3), shall be phased in respectively as follows:
  - (A) Starting December 31, 2003 and July 1, 2004 respectively for all sales, supplies, or offers of California gasoline by a producer or importer from its production facility or import facility.
  - (B) Starting February 14, 2004 and August 15, 2004 respectively for all other sales, supplies, offers or movements of California gasoline except for transactions directly involving:
    - 1. the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility, or
    - 2. the delivery of gasoline from a bulk plant to a retail outlet or bulk purchaser-consumer facility.
  - (C) Starting March 31, 2004 and September 30, 2004 respectively for all remaining sales, supplies, offers or movements of California gasoline, including transactions directly involving the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility.
- (6) *Phase-in for low-throughput fueling facilities*. The prohibitions in section 2262.6(c)(1) and (2), and in section 2262.6(c)(3), starting respectively on December 31, 2003 and July 1, 2004, shall not apply to transactions directly involving the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility, where the person selling, offering, or supplying the gasoline demonstrates as an affirmative defense that the exceedance of the standard was caused by gasoline delivered to the retail outlet or bulk purchaser-consumer facility prior to the date on which the delivery became subject to the prohibition pursuant to the phase-in provisions in section 2262.6(c)(5).

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).

\* \* \* \* \*

# Section 2262.9. Requirements Regarding Denatured Ethanol Intended For Use as a Blend Component in California Gasoline.

- (a) Standards.
  - (1) Standards for denatured ethanol. Starting December 31, 2003, no person shall sell, offer for sale, supply or offer for supply denatured ethanol intended for blending with CARBOB or California gasoline that fails to comply with <u>any of</u> the following standards:
    - (A) Standards for properties regulated by the CaRFG Phase 3 standards.
      - 1. A sulfur content not exceeding 10 parts per million;
      - 2. A benzene content not exceeding 0.06 percent by volume; or and
      - 3. An olefins content not exceeding 0.5 percent by volume; or and
      - 4. An aromatic hydrocarbon content not exceeding 1.7 percent by volume.

\* \* \* \* \*

- (3) Standards for products represented as appropriate for use as a denaturant in ethanol.
  - (A) Except as otherwise provided in section (a)(3)(B), starting December 31, 2003, 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:
    - 1. A benzene content exceeding 1.10 percent by volume; or
    - 2. An olefins content exceeding 10.0 percent by volume; or
    - 3. An aromatic hydrocarbon content exceeding 35.0 percent by volume.
  - (B) A person may sell, offer for sale, supply or offer for supply a product that is represented as only suitable for use as an ethanol denaturant in ethanol intended for blending with CARBOB or California gasoline if the denatured ethanol contains no more than a specified percentage of the denaturant that is less than 4.76 percent. In this case, the product must

Amendments as adopted 11/18/04

be prominently labeled as only lawful for use as a denaturant where the denatured ethanol contains no more than the specified percentage of the denaturant, and the seller, supplier or offeror must take reasonably prudent precautions to assure that the denaturant will not be used in concentrations greater than the specified percentage in ethanol intended for blending with CARBOB or California gasoline. If these conditions are met, the standards in section (a)(3)(A) for the denaturant will be adjusted by multiplying the stated values by (4.76) max.%), where "max.%" is the maximum percentage of denaturant specified for the denatured ethanol.

\* \* \* \* \*

- (c) Documentation required for the transfer of denatured ethanol intended for use as a blend component in California gasoline.
  - (1) (A) Starting December 31, 2003, and except as provided in section (c)(1)(B), on each occasion that any person transfers custody or title of denatured ethanol intended for use as a blend component 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 a blend component in California gasoline.
    - (B) Starting December 31, 2003, on each occasion that any person transfers custody or title of denatured ethanol that is intended to be added to CARBOB designated for blending with denatured ethanol exceeding any of the standards in section (a)(1)(A), the transferor shall provide the transferee a document that prominently identifies the maximum sulfur, benzene, olefin and aromatic hydrocarbon content of the denatured ethanol, and states that the denatured ethanol may only be lawfully added to CARBOB that is designated for blending with denatured ethanol having such properties.
  - (2) Starting December 31, 2003, any person who sells or supplies denatured ethanol intended for use as a blend component in California gasoline from the California facility at which it was imported or produced shall provide the purchaser or recipient a document that identifies:
    - (A) The name and address of the person selling or supplying the denatured ethanol, and identification of the person as the producer or importer of the denatured ethanol; and
    - (B) With respect to imported denatured ethanol, The name, location and operator of the facility(ies) at which the ethanol was produced and at which the denaturant was added to the ethanol. As an alternative, the document provided to the purchaser or recipient may identify the date and time the ethanol was supplied from its import or production facility, and state that the person selling or supplying the denatured ethanol from the California facility at which it was imported or produced maintains at the facility a list of the name, location, and operator of all of the facilit(ies) at which the ethanol was produced and at which the

Amendments as adopted 11/18/04

denaturant was added to the ethanol. In this case, the person shall for at least two years maintain such information, and records identifying the entities that produced the ethanol and added the denaturant in each batch of denatured ethanol imported to the facility; during that two year period, the person shall make the information and records, available to the Executive Officer within five days after a request for the material.

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).

#### Section 2263. Sampling Procedures and Test Methods.

- (a) *Sampling Procedures*. In determining compliance with the standards set forth in this subarticle 2, an applicable sampling methodology set forth in 13 C.C.R. section 2296 shall be used.
- (b) Test Methods.
  - (1) In determining compliance with the <u>gasoline</u> standards set forth in this subarticle 2, <u>including</u> those in the sections identified in Table 1, the test methods presented in Table 1 shall be used. All identified test methods are incorporated herein by reference.

Amendments as adopted 11/18/04

Table 1

| Section   | Gasoline Specification                                    | Test Method <sup>a</sup>  |  |
|-----------|---|---|--|
| 2262      | Reid Vapor Pressure                                       | ASTM D 323-58 <sup>b</sup> or 13 C.C.R. Section 2297  |  |
| 2262      | Sulfur Content  | ASTM D 2622-94 <sup>c, d</sup> or<br>ASTM D 5453-93   |  |
| 2262      | Benzene Content   | ASTM D 5580-00 °  |  |
| 2262      | Olefin Content  | ASTM D 1319-95a <sup>f</sup> (Through December 31, 2001) ASTM D 6550-00 <sup>g,h,i</sup> (Starting January 1, 2002) |  |
| 2262      | Oxygen Content  | ASTM D 4815-99  |  |
| 2262      | T90 and T50   | ASTM D 86-99ae1   |  |
| 2262      | Aromatic Hydrocarbon<br>Content                           | ASTM D 5580-00 <sup>j</sup>   |  |
| 2262.5(b) | Ethanol Content   | ASTM D 4815-99  |  |
| 2262.6    | MTBE Content  | ASTM D 4815-99  |  |
| 2262.6(c) | Oxygen from oxygenates identified in section 2262.6(c)(4) | ASTM D 4815-99  |  |

\* \* \* \* \*

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, 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).

\* \* \* \* \*

## Section 2265. Gasoline Subject to PM Alternative Specifications Based on the California Predictive Model.

- (a) Election to sell or supply a final blend as a PM alternative gasoline formulation.
  - (1) In order to sell or supply from its production facility or import facility a final blend of California gasoline as a PM alternative gasoline formulation subject to PM alternative specifications, a producer or importer shall satisfy the requirements of this section (a).
  - (2) The producer or importer shall evaluate the candidate PM alternative specifications for gasoline subject to the CaRFG Phase 2 standards in accordance with the Air Resources Board's "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," as adopted April 20, 1995 and last amended December 11, 1998, which is incorporated herein by reference. The producer or importer shall evaluate the candidate PM alternative specifications for gasoline subject to the CaRFG Phase 3 standards in accordance with the Air Resources Board's "California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model," as last amended April 25, 2001 corrected November 18, 2004, which is incorporated herein by reference (the two documents incorporated by reference in this section 2265(a)(2) are collectively referred to as the "Predictive Model Procedures"). If the PM alternative specifications meet the criteria for approval in the applicable Predictive Model Procedures, the producer shall notify the executive officer of: (A) The identity, and location, and estimated volume of the final blend; (B) the PM alternative specifications that will apply to the final blend, including for each specification whether it applies as a PM flat limit or a PM averaging limit; and (C) the numerical values for percent change in emissions for oxides of nitrogen, hydrocarbons, and potency-weighted toxic air contaminants as determined in accordance with the applicable Predictive Model Procedures. The notification shall be received by the executive officer before the start of physical transfer of the gasoline 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.
  - (3) Once a producer or importer has notified the executive officer pursuant to this section 2265(a) that a final blend of California gasoline is being sold or supplied from a production or import facility as a PM alternative gasoline formulation, all final blends of California gasoline subsequently sold or supplied from that production or import facility shall be subject to the same PM alternative specifications until the producer or importer either (A) designates a final blend at that facility as a PM alternative gasoline formulation subject to different PM alternative specifications, (B) elects in accordance with section 2264.2 to have a final blend at that facility subject to flat limit compliance options and/or averaging compliance options, or (C) elects in accordance with section 2266(c) to sell a final blend at that facility as an alternative gasoline formulation.

14

- (4) The executive officer may enter into a written protocol with any individual producer or importer for the purposes of specifying how the requirements in section (a)(2) 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 (a)(2). Any such protocol shall include the producer's or importer's agreement to be bound by the terms of the protocol.
- (5) If, through no intentional or negligent conduct, a producer or importer cannot report within the time period specified in section (a)(2) 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 (a)(5) have been met, timely notification shall be deemed to have occurred.

\* \* \* \* \*

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, 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).

\* \* \* \* \*

# 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, 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."

Amendments as adopted 11/18/04

(2) Determining whether a final blend of CARBOB complies with the standards for California gasoline.

#### (A) General.

- 1. Applicability. This section (a)(2) governs the determination of whether a final blend of CARBOB complies with the standards for California gasoline that apply when the gasoline is sold or supplied from the production or import facility at which it was produced or imported. Section (a)(6) governs the determination of whether downstream CARBOB that has already been supplied from its production or import facility complies with the applicable cap limits for California gasoline.
- 2. 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, 2262.6, 2265 and 2266 shall be determined in accordance with section (a)(2)(B) or (a)(2)(C) as applicable.
- 3. If the producer or importer has not complied with 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, 2262.5, 2265 and 2266 shall be determined without using the CARBOB Model or 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, by providing the notice in section (b)(1)(C). In this case, the CARBOB limits for the final blend shall be determined in accordance with the "Procedures for Using the California Model for California Reformulated Gasoline Blendstocks for Oxygenate Blending (CARBOB)," as adopted April 25, 2001. The CARBOB's compliance with the assigned CARBOB limit for a property shall constitute compliance with the corresponding finished gasoline limit be it a section 2262 flat limit, PM flat limit, TC limit, or (if no designated alternative limit has been established) section 2262 or PM averaging limit. In addition, where the producer or importer has elected to use the CARBOB model for a given final blend that is not being transferred from its production or import facility during the Reid vapor pressure control period for that

- facility set forth in section 2262.4(a), the final blend must have a Reid vapor pressure no lower than the value used in the T50 CARBOB model.
- 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. 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)(E) designated a range for oxygen from denatured ethanol of 1.8 wt.% to 2.2 wt.% (or a range that is within 1.8 wt. % and 2.2 wt.% and includes 2.0 wt.%), denatured ethanol equal to 5.7 vol.% of the blended volume shall be added; where the designated range for oxygen from denatured ethanol is 2.5 wt.% to 2.9 wt.% (or is within 2.5 wt.% and 2.9% and includes 2.7 wt.%), denatured ethanol equal to 7.7 vol.% of the blended volume shall be added; and where the designated range for oxygen from denatured ethanol is 3.3 wt.% to 3.7 wt.% (or is within 3.3 wt.% and 3.7 wt.% and includes 3.5 wt.%), denatured ethanol equal to 10.0 vol.% of the blended volume shall be added. In all other cases where the designated range for oxygen from denatured ethanol is no greater than 0.4 wt.%, the amount of denatured ethanol added shall be the volume percent that results in an oxygen content at the midpoint of the range of oxygen, based on the following equation:

Vol.% Denatured Ethanol =  $620 \div [(218.8 \div \text{wt.\% oxygen}) - 0.40]$ 

Where the producer or importer has in accordance with section (b)(1)(E) designated a range of amounts of oxygen that is greater than 0.4 wt.%, or an oxygenate other than denatured ethanol, the oxygenate shall be added in an amount that results in an oxygen content within 0.2 wt.% of the designated minimum oxygen level.

Where the producer or importer has in accordance with section (b)(1)(E) designated a range of amounts of oxygen that is greater than 0.4 wt.%, or an oxygenate other than denatured ethanol, the oxygenate shall be added in an amount that results in an oxygen content within 0.2 wt.% of the designated minimum oxygen level.

- (D) Characteristics of denatured ethanol used in determining whether a final blend of CARBOB complies with the standards for California gasoline.
  - 1. Default denatured ethanol characteristics on or after December 31, 2003 when the CARBOB Model is used. Except as provided in section (a)(2)(D)3., where a producer or importer has elected to use the CARBOB Model for a final blend of CARBOB supplied from its production or import facility on or after December 31, 2003, the following default denatured ethanol specifications shall be specified for the CARBOB Model:

Sulfur content: 10 parts per million
Benzene content: 0.06 volume percent

Olefin content: 0.5 volume percent

Aromatic hydrocarbon content: 1.7 volume percent

2. Default denatured ethanol characteristics on or after December 31, 2003 when the CARBOB Model is not used. Except as provided in section (a)(2)(D)3., where a producer or importer has not elected to use the CARBOB Model, denatured ethanol used as the oxygenate must have the following properties in determining whether CARBOB complies with the standards applicable to California gasoline when it is supplied from the production facility or import facility on or after December 31, 2003:

Sulfur content: 3 - 10 parts per million
Benzene content: 0 - 0.06 volume percent
Olefin content: 0 - 0.5 volume percent
Aromatic hydrocarbon content: 0 - 1.7 volume percent

- 3. Producer- or importer-specified characteristics of denatured ethanol used in determining whether a final blend of CARBOB complies with the standards for California gasoline.
  - a. With respect to a final blend of CARBOB supplied from its production or import facility prior to December 31, 2003, the producer or importer must specify the properties of the oxygenate used in determining whether the final blend of CARBOB complies with the applicable California gasoline standards, by providing the notice in section (b)(1)(D). With respect to a final blend of CARBOB supplied from its production or import facility on or after December 31, 2003, the producer or importer may elect to specify the properties of the oxygenate in accordance with the preceding sentence. Where the producer or importer has elected to use the CARBOB model in connection with the final blend, the maximum value for each property identified in the section (b)(1)(D) notification shall be used for the CARBOB Model. Where the producer or importer has not elected to use the

18

CARBOB model in connection with the final blend, the oxygenate used in oxygenate blending and testing in accordance with section (a)(2)(C)1. must not exceed the maximum value for each property identified in the section (b)(1)(D) notification; that oxygenate's specifications for each property may be under the maximum value for each property identified in the section (b)(1)(D) notification by no more than the following:

Sulfur content: 5 parts per million
Benzene content: 0.06 volume percent
Olefin content: 0.1 volume percent
Aromatic hydrocarbon content: 1.0 volume percent

- b. *Maintaining oxygenate samples for use in compliance testing*. A producer or importer who is specifying the properties of the oxygenate used in a final blend of CARBOB in accordance with the preceding section (a)(2)(D)3.a. must maintain at the production or import facility, while the final blend is at the facility, oxygenate meeting the required specifications in quantities that are sufficient to enable state board inspectors to use the oxygenate in compliance determinations.
- (E) Protocol for determining whether a final blend of CARBOB complies with the standards for California gasoline. The executive officer may enter into a written protocol with any individual producer or importer for the purpose of specifying a alternative method for determining whether a final blend of CARBOB complies with the standards for California gasoline, as long as the executive officer reasonably determines that application of the protocol is not less stringent or enforceable than application of the express terms of section (a)(2)(A)-(D). Any such protocol shall include the producer's or importer's agreement to be bound by the terms of the protocol.
- (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, 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. 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 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

Amendments as adopted 11/18/04

- minus the designated maximum volume percent, expressed as a decimal fraction, that the oxygenate will represent 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.
- (5) Assignment of designated alternative limits for CARBOB and for the oxygenated California gasoline where the producer or importer has elected to use the CARBOB model.
  - (A) Applicability. Applicability. This section (a)(5) applies where a producer or importer has elected to have the CARBOB model apply in connection with a final blend of CARBOB which is also subject to an averaging compliance option or a PM averaging compliance option for one or more properties.
  - (B) Assignment of CARBOB designated alternative limit. Assignment of CARBOB designated alternative limit. The producer or importer may assign a CARBOB designated alternative limit for the final blend of CARBOB by satisfying the notification requirements of section (a)(5)(D). In no case shall a CARBOB designated alternative limit be less than the sulfur, benzene, olefin or aromatic hydrocarbon content, or T90 or T50, of the final blend shown by the sample and test of the CARBOB conducted pursuant to section 2270. The CARBOB designated alternative limit shall be treated as the designated alternative limit under section 2262.3(c)(2), and a violation of section 2262.3(c)(2) will exist when the CARBOB exceeds the CARBOB designated alternative limit.
  - (C) Determining the designated alternative limit for the final blend after the CARBOB is oxygenated. Determining the designated alternative limit for the final blend after the CARBOB is oxygenated. Whenever a producer or importer has assigned a designated alternative limit for a final blend of CARBOB, the designated alternative limit for the final blend after the CARBOB is oxygenated shall be determined in accordance with the "Procedures for Using the California Model for California Reformulated Gasoline Blendstocks for Oxygenate Blending (CARBOB)," as adopted April 25, 2001. This will be the final blend's designated alternative limit for purposes of compliance with sections 2262.3(c)(3) and 2264(b) and (c).
  - (D) Notification. Notification. The producer or importer shall notify the executive officer of the CARBOB designated alternative limit, the designated alternative limit for the final blend after it is oxygenated, and all other information identified in section 2264(a)(2)(A), within the time limits set forth in section 2264(a)(2)(A) and subject to section 2264(a)(3) and (4).

Amendments as adopted 11/18/04

- (6) Determining whether downstream CARBOB complies with the cap limits for California gasoline.
  - (A) Determining whether downstream CARBOB complies with the cap limits for California gasoline through the use of CARBOB cap limits derived from the CARBOB Model. Whenever downstream CARBOB designated for ethanol blending has already been supplied from its production or import facility, the CARBOB's compliance with the cap limits for California gasoline may be determined by applying the CARBOB cap limits in the following table:

| Property  | CARBOB Cap Limits |                     |  |  |
|---|-------------------|---------------------|--|--|
|   | CaRFG2            | CaRFG3              |  |  |
| Reid Vapor Pressure <sup>1</sup> (pounds per square inch) | 5.78              | 5.99                |  |  |
| Sulfur Content (parts per million by weight)              | 89                | $\frac{66^2}{32^2}$ |  |  |
| Benzene Content (percent by volume)                       | 1.33              | 1.22                |  |  |
| Aromatics Content (percent by volume)                     | 33.1              | 38.7                |  |  |
| Olefins Content (percent by volume)                       | 11.1              | 11.1                |  |  |
| T50   | $232^{3}$         | $232^{3}$           |  |  |
| (degrees Fahrenheit)                                      | $237^{3}$         | $237^{3}$           |  |  |
| T90 (degrees Fahrenheit)                                  | 335               | 335                 |  |  |

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

21

The CaRFG Phase 3 CARBOB cap limits for sulfur are phased in starting December 31, 2003, and December 31, 2004 2005, in accordance with section 2261(b)(1)(A).

The first number applies to CARBOB that is subject to the Reid vapor pressure standard pursuant to section 2262.4, and the second number applies to CARBOB that is not subject to the Reid vapor pressure standard.

<sup>(</sup>B) Determining whether downstream CARBOB complies with the cap limits for California gasoline by oxygenate blending and testing. Whenever downstream CARBOB designated for oxygenate blending has already been supplied from its production or import facility, the CARBOB's compliance with the cap limits for California gasoline may be determined 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). Denatured ethanol used as the oxygenate must have the properties set forth in section (a)(2)(D)2. Where the designated range for oxygen from denatured ethanol is 1.8 wt.% to 2.2 wt.% (or is within 1.8 wt.% and 2.2 wt.% and includes 2.0 wt.%), denatured ethanol equal to 5.7 vol.% of the blended volume shall be added; where the designated range for oxygen from denatured ethanol is 2.5 wt.% to 2.9 wt.% (or is within 2.5 wt.% and 2.9 wt.% and includes 2.7 wt.%), denatured ethanol equal to 7.7 vol.% of the blended volume shall be added; and where the designated range for oxygen from denatured ethanol is 3.3 wt.% to 3.7 wt.% (or is within 3.3 wt.% and 3.7 wt.% and includes 3.5 wt.%), denatured ethanol equal to 10.0 vol.% of the blended volume shall be added. In all other cases where the designated range for oxygen from denatured ethanol is no greater than 0.4 wt.%, the amount of denatured ethanol added shall be the volume percent that results in an oxygen content at the midpoint of the range of oxygen, based on the following equation:

Vol.% Denatured Ethanol = 
$$620 \div [(218.8 \div \text{wt.\% oxygen}) - 0.40]$$

Where the designated a range of amounts of oxygen is greater than 0.4 wt.%, or an oxygenate other than denatured ethanol is designated, the oxygenate shall be added in an amount that results in an oxygen content within 0.2 wt.% of the designated minimum oxygen level.

(C) *Protocols*. 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)(6)(B), or different CARBOB cap limits under section (a)(6)(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 to ARB regarding the supply of CARBOB from the facility at which it was produced or imported. Notification to ARB 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, along with any information required under section 2265(a)(2) (for a PM alternative gasoline formulation) or 2266(c) (for a test-certified alternative gasoline formulation). 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
      - 1. Each of the CARBOB limits that will apply to the final blend for properties not subject to the averaging compliance option or the PM averaging compliance option; and
      - 2. For any property subject to the averaging compliance option or the PM averaging compliance option, the averaging or PM averaging limit for the CARBOB (the CARBOB is subject to this limit only if no designated alternative limit is assigned to the CARBOB pursuant to section 2266.5(a)(5)(B));
    - (D) If the producer or importer is specifying, pursuant to section (a)(2)(D)3., the properties of the oxygenate to be added downstream by the oxygenate blender, a statement of that election, the type of oxygenate, and the oxygenate's specifications for the following properties:

Maximum sulfur content (nearest part per million by weight)

23

Maximum benzene content (nearest hundredth of a percent by volume)

Maximum olefin content (nearest tenth of a percent by volume)

Maximum aromatic hydrocarbon content (nearest tenth of a percent by volume)

(E) The designation of each oxygenate type or types and amount or range of amounts to be added to the CARBOB, and the applicable flat limit, PM alternative specification, or TC alternative specification for oxygen. 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 TC alternative specifications, 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 or range of amounts of oxygenate to be added must be such that the resulting California gasoline has an oxygen content that meets the oxygen content PM alternative specifications, the amount or range of amounts of oxygenate to be added must be such that the resulting California gasoline has an oxygen content that meets the oxygen content that meets the oxygen content alternative specification for the final blend:

- (2) Applicability of notification to subsequent final blends. Applicability of notification to subsequent final blends. The notification a producer or importer provides pursuant to section (b)(1)(B), (C), (D) and (E) 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 (i) California gasoline rather than CARBOB, or (ii) CARBOB subject to a new notification made pursuant to section (b)(1).
- (3) Allowance of late notifications. Allowance of late notifications. 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)(3) have been met, timely notification shall be deemed to have occurred.
- (4) <u>Protocols.</u> <u>Protocols.</u> 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 producers or importer's agreement to be bound by the terms of the protocol.
- (c) Sampling, testing and recordkeeping by importers of CARBOB. [Reserved]
  - (1) When sampling and testing is required. 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 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 final blend at its import facility. 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).

- (2) Maintaining records. Each importer required to sample and analyze a final blend 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 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 imported by the 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).
- (3) Production of records. An importer shall provide to the executive officer any records required to be maintained by the 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 an importer fails to provide records regarding a final blend of CARBOB in accordance with the requirements of this section, the final blend of CARBOB shall be presumed to have been sold by the 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).
- (4) *Protocols*. The executive officer may enter into a protocol with any 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 importer's agreement to be bound by the terms of the protocol.

- (d) Documentation required when CARBOB is transferred. <u>Documentation required when CARBOB</u> is transferred.
  - (1) Required Documentation. Required Documentation. 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,
    - (B) Identifies the applicable flat limit, PM alternative specification, or TC alternative specification for oxygen, and
    - (C) 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) Compliance by pipeline operator. <u>Compliance by pipeline operator</u>. 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. Restrictions on transferring CARBOB.
  - (1) Required agreement by transferee. <u>Required agreement by transferee</u>. 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) Prohibited sales of CARBOB from a final distribution facility. *Prohibited sales of CARBOB* from a final distribution facility. 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. <u>Restrictions on blending CARBOB with other products.</u>
  - (1) <u>Basic prohibition.</u> <u>Basic prohibition.</u> 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) The specified oxygenate. *The specified oxygenate*.
      - 1. The CARBOB may be blended with 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.
      - 2. Where ethanol is the specified oxygenate and specifications for the ethanol are identified in the product transfer document for the CARBOB pursuant to section 2266.5(d)(1)(C), only ethanol meeting those specifications may be combined with the CARBOB.
      - 3. Where ethanol is the specified oxygenate and specifications for the ethanol are not identified, only ethanol meeting the standards in section 2262.9(a) may be combined with the CARBOB.
    - (B) Identically specified CARBOB. Identically-specified CARBOB. The CARBOB may be blended with other CARBOB for which the same oxygenate type, and the same amount (or range of amounts) of oxygen, was specified by the producer or importer at the time the CARBOB was supplied from the production or import facility. However, where specifications for the denatured ethanol to be added to the CARBOB have been established pursuant to section 2266.5(a)(2)(D)3, it may only be blended with other CARBOB for which the same denatured ethanol specifications have been set.
    - (C) <u>CARBOB</u> specified for different oxygen level. <u>CARBOB</u> specified for different oxygen <u>level</u>. Where a person is changing from an initial to a new type of CARBOB stored in a storage tank at a terminal or bulk plant, and the conditions below are met; in this case, the CARBOB in the tank after the new type of CARBOB is added will be treated as that new type of CARBOB.

- 1. The change in service is for legitimate operational reasons and is not for the purpose of combining the different types of CARBOB;
- 2. The initial and new CARBOBs are designated for blending with different amounts (or ranges of amounts) of oxygen, and the change in oxygen content will not exceed 1.1 weight percent of the oxygenated gasoline blend;
- 3. The volume of the new CARBOB that is added to the tank is at least four times as large as the volume of the initial CARBOB in the tank, and
- 4. The sulfur content of the new CARBOB added to the tank is no more than 12 parts per million.
- (D) California gasoline not subject to RVP standard. <u>California gasoline not subject to RVP standard.</u> Where a person is changing from California gasoline to CARBOB as the product stored in a storage tank at a terminal or bulk plant and the conditions below are met; in this case the product in the tank, pipe or manifold after the new product is added will be treated as the new type of product.
  - 1. The change in service is for legitimate operational reasons and is not for the purpose of combining the California gasoline and CARBOB and
  - 2. The resulting blend of product in the tank is supplied from the terminal or bulk plant during a time that it is not subject to the standards for Reid vapor pressure under section 2262.4.
- (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.
  - 1. The gasoline is added to the CARBOB for one of the following operational reasons:
    - a. The gasoline resulted from oxygenating CARBOB at the terminal or bulk plant during calibration of oxygenate blending equipment; or
    - b. The gasoline resulted from the unintentional over- or under-oxygenation of
       CARBOB during the loading of a cargo tank truck at the terminal or bulk plant; or
    - c. The gasoline was pumped out of a gasoline storage tank at a motor vehicle fueling facility for legitimate operational reasons.

Amendments as adopted 11/18/04

- 2. The non-oxygenate portion of the gasoline complies with the applicable cap limits for CARBOB in section 2266.5(a)(6).
- 3. The resulting mixture of CARBOB has an oxygen content not exceeding 0.1 percent by weight.
  - a. The oxygen content of the mixture may be determined arithmetically by [i] using the volume of the CARBOB prior to mixing based on calibrated tank readings, [ii] using the volume of the gasoline added based on calibrated meter readings, [iii] using the volume of the denatured ethanol in the gasoline being added based on direct calibrated meter readings of the denatured ethanol if available, [iv] calculating weight percent oxygen of the gasoline being added from volume percent denatured ethanol based on the following formula:

 $(wt.\% oxygen) \approx 218.8/\{[620/(vol.\% deEtOH)] + 0.40\},$ 

and [v] accounting for any oxygen in the CARBOB tank due to previous additions of gasoline to the tank.

- b. If the meter readings described in section 2266.5(f)(1)(E)3.a.[iii] are not available, the oxygen content of the mixture may be determined arithmetically by [i] using the volume of the CARBOB prior to mixing based on calibrated tank readings, [ii] using the volume of the gasoline added based on calibrated meter readings, [iii] using the oxygen content of the gasoline in weight percent based on sampling and testing of the gasoline for denatured ethanol content in accordance with methods specified in section 2263, and [iv] accounting for any oxygen in the CARBOB tank due to previous additions of gasoline to the tank.
- c. In making the determination described in section 2266.5(f)(1)(E)3.a. or b., the oxygen content of the mixture shall be calculated based on the following formula:

(wt.% oxygen) ≈ [(volume CARBOB)\*(wt.% oxygen in CARBOB) + (volume gasoline)\*(wt.% oxygen in gasoline] / [(volume CARBOB) + (volume gasoline)].

- 4. Prior to the mixing, the operator of the terminal or bulk plant notifies the executive officer of 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.

### (2) Protocols.

- (A) Protocols covering the changeover in service of a storage tank. 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.
- (B) Protocols for blending transmix into CARBOB. 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 blend transmix into CARBOB which has been supplied from its production or import facility. The executive officer may enter into such a protocol only if he or she reasonably determines that alternatives to the blending are not practical and the blending will not significantly affect the properties of the CARBOB gasoline into which the transmix is added. Any such protocol shall include the person's agreement to be bound by the terms of the protocol.
- (C) Protocols In Other Situations. 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 add California gasoline or other CARBOB to CARBOB in a storage tank at a terminal or bulk plant in situations other than those identified in sections 2266.5(f)(1)(C), (D), or (E), or (f)(2)(A) or (B). The executive officer may enter into such a protocol only if he or she reasonably determines that alternatives to the activity are not practical and the blending will not significantly affect the properties of the CARBOB into which the gasoline or CARBOB is added. The protocol shall include any of the conditions in section 2266.5(f)(1)(E) that the executive officer determines are necessary and appropriate. Any such protocol shall include the person's agreement to be bound by the terms of the protocol.

Amendments as adopted 11/18/04

- (g) Requirements for oxygenate blenders, Requirements for oxygenate blenders.
  - (1) Registration and Certification. Registration and Certification.
    - (A) Registration. Registration. 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, an 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) Required contents of registration. *Required contents of registration*. 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) <u>Issuance of certificate</u>. <u>Issuance of certificate</u>. 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 <u>43021</u> <u>43026</u>.
    - (D) Submittal of updated information. Submittal of updated information. Any oxygen blender must submit updated registration information to the executive officer at the address identified in section (g)(1)(A) within 30 days of any occasion when the registration information previously supplied becomes incomplete or in accurate.
  - (2) Requirement to add oxygenate to CARBOB, 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.

Amendments as adopted 11/18/04

- (3) Additional requirements for terminal blending. 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.
- (h) Downstream blending of California gasoline with nonoxygenate blendstocks. <u>Downstream blending</u> of California gasoline with nonoxygenate blendstocks.
  - (1) Basic prohibition. Basic prohibition. No person may combine California gasoline which has been supplied from a production or import facility with any nonoxygenate blendstock, other than vapor recovery condensate, unless the person can affirmatively demonstrate that (1) the blendstock that is added to the California gasoline meets all of the California gasoline standards without regard to the properties of the gasoline to which the blendstock is added, and (2) the person meets with regard to the blendstock all requirements in this subarticle applicable to producers of California gasoline.

### (2) Exceptions. Exceptions.

- (A) Protocols. <u>Protocols.</u> Notwithstanding section (i)(1), the executive officer may enter into a written protocol with any person to identify conditions under which the person may lawfully blend transmix into California gasoline which has been supplied from its production or import facility. The executive officer may only enter into such a protocol if he or she reasonably determines that alternatives to the blending are not practical and the blending will not significantly affect the properties of the California gasoline into which the transmix is added. Any such protocol shall include the person's agreement to be bound by the terms of the protocol.
- (B) Blending to meet a cap limit. Blending to meet a cap limit. Notwithstanding section (i)(1) or 2262.5(d), a person may add nonoxygenate or oxygenated blendstock to California gasoline that does not comply with one or more of the applicable cap limits contained in section 2262, where the person obtains the prior approval of the executive officer based on a demonstration that adding the blendstock is a reasonable means of bringing the gasoline into compliance with the cap limits.

- (i) Restrictions during the RVP season on blending gasoline containing ethanol with California gasoline not containing ethanol. Restrictions during the RVP season on blending gasoline containing ethanol with California gasoline not containing ethanol.
  - (1) Basic prohibition. Basic prohibition. Within each air basin during the Reid vapor pressure cap limit periods specified in section 2262.4(a)(2), no person may combine California gasoline produced using ethanol with California gasoline produced without using ethanol, unless the person can affirmatively demonstrate that: (A) the resulting blend complies with the cap limit for Reid vapor pressure set forth in section 2262, or (B) the person has taken reasonably prudent precautions to assure that the gasoline is not subject to the Reid vapor pressure cap limit either because of sections 2261(d) or (f) or 2262.4(c)(1) or (c)(3), or because the gasoline is no longer California gasoline.
  - (2) Exception. Exception. Section 2266.5(i)(1) does not apply to combining California gasolines that are in a motor vehicle's fuel tank.

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, 43016, 43018, 43021, 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).