PROPOSED MODIFICATIONS TO THE PROPOSED REGULATION ORDER

FOLLOW-UP AMENDMENTS TO THE CALIFORNIA PHASE 3 REFORMULATED GASOLINE REGULATIONS

Note: The originally-proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. Proposed modifications are shown in double-underline to indicate additions and ~~double-strikeout~~ to indicate deletions. Headings are shown in bold italics, and are to be italicized in Barclays California Code of Regulations. Commentaries explaining the rationale for modifications are shown in bracketed italics; they are not part of the regulations. In addition, there are a number of instances where headings of subsections have been added to make the structure of the regulations clearer. All of the definitions in section 2260 are now shown to aid in understanding the proposal.

~~Add~~ Amend section 2260(a)~~(6.7)~~, title 13, California Code of Regulations, to read as follows:

Section 2260. Definitions.

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

(1) "Alternative gasoline formulation" means a final blend of gasoline ~~meeting all of the specifications identified in a certification issued by the Executive Officer pursuant to the "California Test Procedures for Evaluating Alternative Specifications for Gasoline", adopted September 18, 1992, which is incorporated herein by reference~~ that is either a PM alternative gasoline formulation or a test-certified alternative gasoline formulation.

*[**Commentary:** This post-hearing modification, coupled with the definition of the new term "test-certified alternative gasoline formulation"in section 2260(a)(35), provides a mechanism for referring collectively to final blends subject either to the predictive model provisions or to the vehicle testing provisions.]*

(2) "Averaging compliance option" means, with respect to a specific gasoline property, the compliance option set forth in section 2262.3(c).

(3) "ASTM" means the American Society of Testing and Materials.

(4) "Bulk purchaser-consumer" means a person that purchases or otherwise obtains gasoline in bulk and then dispenses it into the fuel tanks or motor vehicles owned or operated by the person.

(5) "Bulk plant" means an intermediate gasoline distribution facility where delivery of gasoline to and from the facility is solely by truck.

(6) “California gasoline” means:

(A) Gasoline sold, intended for sale, or made available for sale as a motor vehicle fuel in California; and

(B) Gasoline that is produced in California, and that the producer knows or reasonably should know will be offered for sale or supply at an out-of-state terminal or bulk plant at which it will be identified as gasoline produced in California and suitable for sale as a motor vehicle fuel in California.

(6.5) “California reformulated gasoline blendstock for oxygenate blending, or ‘CARBOB,’“ means a petroleum-derived liquid which is intended to be, or is represented as, a product that will constitute California gasoline upon the addition of a specified type and percentage (or range of percentages) of oxygenate to the product after the product has been supplied from the production or import facility at which it was produced or imported.

(6.6) “CaRFG Phase 2” means California Phase 2 reformulated gasoline.

(6.7) “CaRFG Phase 3” means California Phase 3 reformulated gasoline.

~~(6.7)~~(6.8) “CARBOB ~~alternative specifications~~ limits” means, for a final blend of CARBOB, CARBOB specifications ~~that identify all of the properties identified in a set of PM alternative specifications~~ for maximum Reid vapor pressure, sulfur content, benzene content, olefin content, aromatic hydrocarbon content, T50 and T90, and maximum and minimum oxygen content, expressed ~~at the same level of precision~~ to the number of significant figures identified for each property in the section 2262 standards table, and for any other property identified in a certification order issued by the Executive Officer pursuant to the “California Procedures for Using Vehicle Emissions Testing,” incorporated by reference in section 2266(a), if applicable.

*[**Commentary:** The post-hearing modifications are designed to help enable use of the CARBOB Model for final blends whether or not the Predictive Model is used. Other pre- and post-hearing modifications more clearly expresses the staff’s original intent, with no substantive change. The subsection is renumbered to avoid duplication.]*

(7) “Designated alternative limit” means an alternative gasoline specification limit, expressed in the nearest part per million by weight for sulfur content, nearest hundredth percent by volume for benzene content, nearest tenth percent by volume for aromatic hydrocarbon content, nearest tenth percent for olefin content, and nearest degree Fahrenheit for T90 and T50, which is assigned by a producer or importer to a final blend of California gasoline pursuant to section 2264.

(8) “Ethanol” means ethyl alcohol which meets any additional requirements for ethanol or ethyl alcohol in Health and Safety Code section 43830.

(9) “Executive Officer” means the executive officer of the Air Resources Board, or his or her designee.

(10) “Final blend” means a distinct quantity of gasoline or CARBOB which is introduced into commerce in California without further alteration which would tend to affect a regulated gasoline specification of the fuel.

(11) “Final distribution facility” means the stationary gasoline transfer point from which gasoline or CARBOB is transferred into the cargo tank truck, pipeline, or other delivery vessel from which the gasoline will be delivered to the facility at which the gasoline will be dispensed into motor vehicles; except that a cargo tank truck is the final distribution facility where the cargo tank truck is used to transport CARBOB and gasoline and carries written documentation demonstrating that the designated type and amount or range of amounts of oxygenates designated by the producer or importer will be or have been blended directly into the cargo tank truck prior to delivery of the resulting gasoline from the cargo tank truck to the facility at which the gasoline will be dispensed into motor vehicles.

(12) “Flat limit compliance option” means, with respect to a specific gasoline property, the compliance option set forth in section 2262.3(b), section 2262.4(b)(1), or section 2262.5(c).

(13) “Further process” means to perform any activity on gasoline, including distillation, treating with hydrogen, or blending, for the purpose of bringing the gasoline into compliance with the standards in this subarticle.

(14) “Gasoline” means any fuel that is commonly or commercially known, sold or represented as gasoline, including any volatile mixture of predominantly liquid hydrocarbons that is sold or represented as suitable for use in an automotive spark-ignition engine.

(15) “Imported California gasoline” means California gasoline which is transported into California and does not meet the definition in section 2260(a)(6)(B).

(16) “Import facility” means the facility at which imported California gasoline or CARBOB is first received 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.

(17) “Importer” means any person who first accepts delivery in California of imported California gasoline.

(18) “Motor vehicle” has the same meaning as defined in section 415 of the Vehicle Code.

(19) “Oxygenate” is any oxygen-containing, ashless, organic compound, such as an alcohol or ether, which, when added to gasoline increases the amount of oxygen in gasoline.

(19.3) “Oxygenate blending facility” means any facility (including a truck) at which oxygenate is added to gasoline or blendstock, and at which the quality or quantity of gasoline is not altered in any other manner except for the addition of deposit control additives or other similar additives.

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(19.6) “Oxygenate blender” means any person who owns, leases, operates, controls, or supervises an oxygenate blending facility, or who owns or controls the blendstock or gasoline used or the gasoline produced at an oxygenate blending facility.

(20) “PM alternative gasoline formulation” means a final blend of gasoline that is subject to a set of PM alternative specifications assigned pursuant to section 2265(a).

[Commentary: *This post-hearing modification makes the definition more precise.]*

(21) “PM alternative specifications” means the specifications for the following gasoline properties, as determined in accordance with section 2263 and expressed to the number of significant figures identified for each property in the section 2262 standards table: maximum Reid vapor pressure, ~~expressed in the nearest hundredth of a pound per square inch;~~ maximum sulfur content, ~~expressed in the nearest part per million by weight;~~ maximum benzene content, ~~expressed in the nearest hundredth of a percent by volume;~~ maximum olefin content, ~~expressed in the nearest tenth of a percent by volume;~~ minimum and maximum oxygen content, ~~expressed in the nearest tenth of a percent by weight;~~ maximum T50, ~~expressed in the nearest degree Fahrenheit;~~ maximum T90, ~~expressed in the nearest degree Fahrenheit;~~ and maximum aromatic hydrocarbon content~~, expressed in the nearest tenth of a percent by volume~~.

*[**Commentary**: These are post-hearing nonsubstantive modifications that reduce the complexity of the definition, consistent with the approach in proposed section 2260(a)(6.8).]*

(22) “PM averaging compliance option” means, with reference to a specific gasoline property, the compliance option for PM alternative gasoline formulations under which final blends of gasoline are assigned designated alternative limits in accordance with section 2264.

(23) “PM averaging limit” means a PM alternative specification that is subject to the PM averaging compliance option.

(24) “PM flat limit” means a PM alternative specification that is subject to the PM flat limit compliance option.

(25) “PM flat limit compliance option” means, with reference to a specific gasoline property, the compliance option under which each gallon of gasoline must meet the specification for the property contained in the PM alternative specifications.

(26)(A) “Produce” means, except as otherwise provided in section (a)(26)(B) or (a)(26)(C), to convert liquid compounds which are not gasoline into gasoline or CARBOB. When a person blends volumes of blendstocks which are not gasoline with volumes of gasoline acquired from another person, and the resulting blend is gasoline, the person conducting such blending has produced only the portion of the blend which was not previously gasoline. When a person blends gasoline with other volumes of gasoline, without the addition of blendstocks which are not gasoline, the person does not produce gasoline.

(B) Where a person supplies gasoline to a refiner who agrees in writing to further process the gasoline at the refiner’s refinery and to be treated as the producer of the gasoline, the refiner shall be deemed for all purposes under this article to be the producer of the gasoline.

(C)Where an oxygenate blender blends oxygenates into CARBOB which has already been supplied from a gasoline production facility or import facility, and does not alter the quality or quantity of the CARBOB or the resulting gasoline in any other manner except for the addition of deposit control additives or other similar additives, the oxygenate blender is not producing any portion of the resulting gasoline, and the producer or importer of the CARBOB is treated as the producer or importer of the full volume of the resulting gasoline.

(27) “Producer” means any person who owns, leases, operates, controls or supervises a California production facility.

(28) “Production facility” means a facility in California at which gasoline or CARBOB is produced. Upon request of a producer, the executive officer may designate, as part of the producer’s production facility, a physically separate bulk storage facility which (A) is owned or leased by the producer, and (B) is operated by or at the direction of the producer, and (C) is not used to store or distribute gasoline or CARBOB that is not supplied from the production facility.

(28.5) "Qualifying small refiner" means a small refiner whose California refinery was used in 1998 and 1999 to produce and supply California gasoline meeting the CaRFG Phase 2 standards.

(29) "Qualifying volume" means, for each small refiner, a volume of gasoline determined in accordance with the following four steps, provided that the qualifying volume for Kern Oil & Refining Co.'s Bakersfield refinery shall not exceed 2,920,000 barrels per year (equal to 8000 barrels per day; 2,928,000 barrels per year in leap years):

(A) First, the barrel per calendar day "operating crude oil capacity" of the small refiner's refinery in March 1999 is identified, based on data which are reported to the executive officer from the California Energy Commission (CEC) and are derived from "Monthly Refinery Reports" (EIA 810) submitted to the CEC no later than June 30, 1999. If the CEC is unable to derive such data from the Monthly Refinery Reports for a particular small refiner, the executive officer shall determine the small refiner's operating crude oil capacity in March 1999 based on other publicly available and generally recognized sources.

(B) Second, this operating crude oil capacity is multiplied by 0.9794, representing the highest monthly refinery operating utilization rate in the California refining industry for January 1998 through March 1999, as compiled in the "Monthly Refinery Capacity Data Statewide" report of the CEC.

(C) Third, the resulting crude throughput volume is multiplied by the refinery's highest monthly ratio of gasoline produced to crude oil distilled in January 1998 through March 1999, based on data derived by the CEC from the Monthly Refinery Reports submitted to the CEC no later than June 30, 1999.

(D) Fourth, the resulting gasoline volume is multiplied by 365 to identify an annualized value. In the case of leap years, the gasoline volume is multiplied by 366 to identify the annualized value.

(29.5) "Racing vehicle" means a competition vehicle not used on public highways.

(30) "Refiner" means any person who owns, leases, operates, controls or supervises a refinery.

(31) "Refinery" means a facility that produces liquid fuels by distilling petroleum.

(32) "Small refiner" means any refiner who owns or operates a refinery in California that:

(A) Has and at all times had since January 1, 1978, a crude oil capacity of not more than 55,000 barrels per stream day;

(B) Has not been at any time since September 1, 1988, owned or controlled by any refiner that at the same time owned or controlled refineries in California with a total combined crude oil capacity of more than 55,000 barrels per stream day; and

(C) Has not been at any time since September 1, 1988, owned or controlled by any refiner that at the same time owned or controlled refineries in the United States with a total combined crude oil capacity of more than 137,500 barrels per stream day.

(32.5) "South Coast Area" means the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

(33) "Stream day" means 24 consecutive hours of actual operation of a refinery.

(34) "Supply" means to provide or transfer a product to a physically separate facility, vehicle, or transportation system.

(35) "TC limits" means the set of specifications identified in a certification issued by the Executive Officer pursuant to the "California Procedures for Using Vehicle Emissions Testing," incorporated by reference in section 2266(a).

(36) "Test-certified alternative gasoline formulation" means a final blend of gasoline that is subject to a set of specifications identified in a certification issued by the Executive Officer pursuant to the "California Procedures for Using Vehicle Emissions Testing," incorporated by reference in section 2266(a).

*[**Commentary:** These post-hearing new terms are needed because the prior term "alternative formulation" has been amended to apply to formulations based both on the Predictive Model and on the vehicle testing option. The specific definition of "test-certified alternative gasoline formulation" is drafted to be parallel to the definition of "PM alternative gasoline formulation" – what is determinative is whether the blend is subject to alternative specifications, regardless of the blend's actual compliance with the specifications. Section 2266(b)(1) prohibits the sale of a final blend reported as a test-certified alternative gasoline formulation if it does not meet the applicable alternative specifications. The term "TC limits" is parallel to the terms "PM flat limits" and PM averaging limits."]*

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).

Amend section 2261(f) to read as follows:

Section 2261. Applicability of Standards; Additional Standards.

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(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).

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~~.

(a) ~~Compliance with cap limits~~ ***Compliance with cap limits*.** No person shall sell, offer for sale, supply, offer for supply, or transport California gasoline which exceeds an applicable cap limit for sulfur, benzene, aromatic hydrocarbons, olefins, T50 or T90 set forth in section 2262.

(b) ~~Compliance by producers and importers with the flat limits~~ ***Compliance by producers and importers with the flat limits*.** No producer or importer shall sell, offer for sale, supply, or offer for supply from its production facility or import facility California gasoline which exceeds an applicable flat limit for the properties of sulfur, benzene, aromatic hydrocarbons, olefins, T50, or T90 set forth in section 2262, unless the gasoline (1) is subject to the averaging compliance option for the property in accordance with section 2264.2(a), (2) has been reported as a PM alternative gasoline formulation pursuant to section 2265(a), or (3) has been reported as a~~n~~ test-certified alternative gasoline formulation pursuant to section 2266(c).

*[**Commentary**: This post-hearing modification reflects the new definition in section 2260(a)(36)]*

(c) ~~Optional compliance by producers and importers with the averaging limits~~ ***Optional compliance by producers and importers with the averaging limits.*** No producer or importer shall sell, offer for sale, supply, or offer for supply from its production facility or import facility California gasoline which is subject to the averaging compliance option for the properties of sulfur, benzene, aromatic hydrocarbons, olefins, T50 or T90 in accordance with section 2264.2(a) if any of the following occurs:

(1) The gasoline exceeds the applicable averaging limit for the property set forth in section 2262 and no designated alternative limit for the property has been established for the gasoline in accordance with the requirements of section 2264(a); or

(2) A designated alternative limit for the property has been established for the gasoline in accordance with the requirements of section 2264(a), and the gasoline exceeds the designated alternative limit for that property; or

(3) Where the designated alternative limit exceeds the averaging limit for the property, the exceedance is not fully offset in accordance with section 2264(c).

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).

[The text is shown because of the reference to this section in modified section 2266.5(a)(5)]

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
Imperial County

(B) ~~October 1, 1998 through January 31, 1999 and October 1, 1999 through January 31, 2000~~ *October 1 through October 31, (1996 through 2002 only):*
~~Fresno County~~
~~Madera County~~
South Coast Area

~~(C)October 1, 1998 through January 31, 1999:~~
~~Lake Tahoe Air Basin~~

~~(D) November 1 through February 29 (of any year):~~
~~Imperial County~~

*[**Commentary:** The nonsubstantive modifications simplify the listing of wintertime oxygenate areas and periods by eliminating areas that are not included after January 31, 2000.]*

* * * *

(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~~ Area 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.

*[**Commentary:** The nonsubstantive modifications align the text with the term defined in section 2260(a)(32.5)]*

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).

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) ***Standards 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 fails to comply with 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

3. An olefins content not exceeding 0.5 percent by volume; or

4. An aromatic hydrocarbon content not exceeding 1.7 percent by volume.

(B) ***Standards based on ASTM D 4806-~~98~~99***.

Specification	*Value*	*Test method*
Ethanol, vol.%, min.	92.1	ASTM D 5501-94(1998)ε1
Methanol, vol.%, max.	0.5	
Solvent-washed gum, mg/100 ml, max.	5.0	ASTM D 381-00, air jet apparatus
Water content, vol.%, max.	1	ASTM E 203-96 or E 1064-00
Denaturant content, vol.%, min~~.~~ vol.% max. ~~(Note 1)~~ The only denaturants shall be natural gasoline, gasoline components, or unleaded gasoline.	1.96 4.76	
Inorganic Chloride content, mass ppm (mg/l), max.	40 (32)	Modification of ASTM D512-89(1999), Procedure C[1] ~~(Note 2)~~
Copper content, mg/kg, max.	0.1	Modification of ASTM D1688-95, Procedure D[2] ~~(Note 3)~~
Acidity (as acetic acid), mass % (mg/l), max.	0.007 (56)	ASTM D 1613-96 (1999)
pHe	6.5 - 9.0	ASTM D 6423-99
Appearance	Visibly free of suspended or precipitated contaminants (clean and bright)	Determined at indoor ambient temperature unless otherwise agreed upon between the supplier and purchaser

~~Note 1: The only denaturants used shall be natural gasoline, gasoline components, or unleaded gasoline at a minimum concentration of two parts by volume per 100 parts by volume of fuel ethanol, as defined by Formula CDA 20 of the Bureau of Alcohol, Tobacco, and Firearms (BATF) of the U.S. Treasury Department.~~

Note ~~2~~1: The modification of ASTM D 512, Procedure C consists of using 5 ml of sample diluted with 20 ml of water in place of the 25 ml sample specified in the standard procedure. The water shall meet ASTM D 1193, Type II. The volume of the sample prepared by this modification will be slightly larger than 25 ml. ~~t~~To allow for the dilution factor,

report the chloride ion present in the fuel ethanol sample as the chloride ion present in the diluted sample multiplied by five.

Note ~~3~~2: The modification of ASTM D 1688, Procedures D (atomic absorption) consists of mixing reagent grade ethanol (which may be denatured according to the BATF Formula 3A or 30) in place of water as the solvent or diluent for the preparation of reagents and standard solutions. However, this must not be done to prepare the stock copper solution described in 38.1 of ASTM D 1688. Because a violent reaction may occur between the acid and the ethanol, use water, as specified, in the acid solution part of the procedure to prepare the stock copper solution. Use ethanol for the rinse and dilution only.

*[**Commentary:** Basing the standards on ASTM D 4806-99 rather than 4806-98 means that the standard for pHe needs to be added. The modifications also identify the dates of the various referenced test methods. A post-hearing modification elevates the substantive portions of former Note 1 into the text, as the requirements on the permissable contents of the denaturant are in the nature of a standard.]*

(2) ***Exemption.***

(A) ***Inapplicability of basic standards.*** The standards in section (a)(1)(A) do not apply to a quantity of denatured ethanol sold, offered for sale, supplied, or offered for supply by a person who demonstrates as an affirmative defense that:

1. The person has complied with section (c)(1)(B); and

2. He or she has taken reasonably prudent precautions to assure that the denatured ethanol will only be added to CARBOB which has been designed to be lawfully oxygenated with denatured ethanol having the properties identified in the document provided pursuant to section (c)(1)(B).

(B) ***Substitute standards.*** Starting December 31, 2002, no person shall sell, offer for sale, supply or offer for supply denatured ethanol that is intended for blending with CARBOB or California gasoline and is exempt pursuant to section (a)(2)(A), if the denatured ethanol fails to comply with any of the properties identified in the document provided pursuant to section (c)(1)(B).

*[**Commentar**y: These modifications identify the conditions under which a denatured ethanol that exceeds the basic standards may lawfully be sold because it will only be used in a "cleaner" CARBOB designed for blending with that kind of denatured ethanol. A post-hearing modification requires that in this case the denatured ethanol still will have to meet the substitute specifications assigned to it.]*

~~(2)~~(3) ***Standards for products represented as appropriate for use as a denaturant in ethanol.***

(A) Except as otherwise provided in section (a)(3)(B), ~~S~~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)~~ 1. A benzene content exceeding 1.1 percent by volume; or

~~(B)~~ 2. An olefins content exceeding 10 percent by volume; or

~~(C)~~ 3. An aromatic hydrocarbon content exceeding 35 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 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.

*[**Commentary:** These modifications allow the denaturant to contain proportionately greater amounts of benzene, olefins and aromatic hydrocarbons if the denaturant concentration in the denatured ethanol is reduced below 4.76 percent. This provides ethanol producers additional flexibility while assuring that the overall benzene, olefin and aromatic hydrocarbon concentrations in the denatured ethanol are no greater than they would be if denaturant at the originally proposed limits were added at the maximum 4.76 percent level permitted under ASTM D 4806.]*

(b) ***Test Methods.***

(1) In determining compliance with the denatured ethanol standards in ~~this~~ section~~,~~ (a)(1)(A):

~~(1)~~ (A)The sulfur content of denatured ethanol shall be determined by ASTM D 5453-93.

~~(2)~~ (B) 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~~ The result

will then be multiplyingied ~~the result~~ by ~~0.048~~ 0.0476, except that where it is demonstrated that the denatured ethanol contains less than 4.76 percent denaturant, the result will be multiplied by the decimal fraction representing the percent denaturant.

~~(3)~~ (2) In determining compliance with the denaturant standards in section (a)(3), ~~T~~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.

*[**Commentary:** The post-hearing reorganization is designed to make the regulation clearer. The modifications in section (b)(1)(B) reflect the modifications in section (a)(3)(B) described above.]*

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

(1) (A) Starting December 31, 2002,and except as provided in section (c)(1)(B), ~~O~~on each occasion ~~when~~ that 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.

(B) Starting December 31, 2002, 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, 2002, ~~A~~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~~:~~, and

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

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

*[**Commentary:** The documentation requirements would not start until December 31, 2002, because ethanol supplied before that date is not subject to the section (a)(1) standards. Section (c)(1)(B) identifies the documentation needed where the ethanol exceeds the standards and is designed for blending only with a "cleaner" CARBOB. This is necessary because it will be illegal to add that ethanol to CARBOB that has not been designed especially for it. The post-hearing elimination of section 2269(c)(2)(C) and consolidation with section 2269(c)(2)(B) make the regulation more concise; the modification to section 2269(c)(2) eliminates a redundancy.]*

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).

Amend section 2263(b), title 13, California Code of Regulations, to read as follows:

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 standards set forth in this subarticle 2, the test methods presented in Table 1 shall be used. All identified test methods are incorporated herein by reference.

Table 1

Section	***Gasoline Specification***	***Test Method*** [a]
2262	Reid Vapor Pressure	ASTM D 323-58 [b] or 13 C.C.R. Section 2297
2262	Sulfur Content	ASTM D 2622-94 [c, d] or ASTM D 5453-93
2262	Benzene Content	ASTM D 5580-95 [e]
2262	Olefin Content	ASTM D 1319-95a [f]
2262	Oxygen Content	ASTM D 4815-~~94~~99
2262	T90 and T50	ASTM D 86-90
2262	Aromatic Hydrocarbon Content	ASTM D 5580-~~95~~00 [g]
2262.5(b)	Ethanol Content	ASTM D 4815-~~94a~~99
2262.6	MTBE Content	ASTM D 4815-~~94a~~99

*[**Commentary:** The updated test method for aromatic hydrocarbon content contains one clarification and makes no substantive change compared to the 1995 version. Note that this text does not show the amendments to the test methods for T50, T90 and olefin content, approved by the Board November 16, 2000 in a separate rulemaking. Those other amendments will be incorporated once they are adopted.]*

* * * *

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).

Amend section 2264, title 13, California Code of Regulations, to read as follows:

Section 2264. Designated Alternative Limits.

(a) ***Assignment of a designated alternative limit.***

(1) A producer or importer that has elected to be subject to an averaging limit specified in section 2262 may assign a designated alternative limit to a final blend of California gasoline produced or imported by the producer or importer by satisfying the notification requirements in this section (a). In no case shall a 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 conducted pursuant to section 2270, or section 2266.5(a), as applicable. If a producer or importer intends to assign designated alternative limits for more than one gasoline specification to a given quantity of gasoline, the party shall identify the same final blend for all designated alternative limits for the gasoline.

(2) (A) The producer or importer shall notify the executive officer of the estimated volume (in gallons), the designated alternative limit, the blend identity, and the location of each final blend receiving a designated alternative limit. This 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. 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.

(B) For each final blend receiving a designated alternative limit exceeding an applicable averaging limit in section 2262, the producer or importer shall notify the executive officer of the date and time of the start of physical transfer from the production or import facility, within 24 hours after the start of such physical transfer. For each final blend receiving a designated alternative limit less than an applicable averaging limit in section 2262, the producer or importer shall notify the executive officer of the date and time of the completion of physical transfer from the production or import facility, within 24 hours after the completion of such physical transfer.

(3) If, through no intentional or negligent conduct, a producer or importer cannot report within the time period specified in (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)(3) have been met, timely notification shall be deemed to have occurred.

(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 sections (a)(2) and (c) ~~through (i)~~ 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 sections (a)(2) and (c) ~~through (i)~~. Any such protocol shall include the producer's or importer's agreement to be bound by the terms of the protocol.

(5) Whenever the final blend of a producer or importer includes volumes of gasoline the party has produced or imported and volumes the party has neither produced nor imported, the producer's or importer's designated alternative limit shall be assigned and applied only to the volume of gasoline the party has produced or imported. In such a case, the producer or importer shall report to the executive officer in accordance with section (a) both the volume of gasoline produced and imported by the party, and the total volume of the final blend. The party shall also additionally report the sulfur content, benzene content, olefin content, aromatic hydrocarbon content, T90, and T50, as applicable, of the portion of the final blend neither produced nor imported by the party, determined as set forth in section 2270(b), or section 2266.5(a)(2), as applicable.

(b) ***Additional prohibitions regarding gasoline to which a designated alternative limit has been assigned.***

(1) No producer or importer shall sell, offer for sale, or supply California gasoline in a final blend to which the producer or importer has assigned a designated alternative limit exceeding an applicable averaging limit in section 2262, where the total volume of the final blend sold, offered for sale, or supplied exceeds the volume reported to the executive officer pursuant to section (a).

(2) No producer or importer shall sell, offer for sale or supply California gasoline in a final blend to which the producer or importer has assigned a designated alternative limit less than an applicable averaging limit in section 2262, where the total volume of the final blend sold, offered for sale, or supplied is less than the volume reported to the executive officer pursuant to section (a).

(c) ***Offsetting exceedances of an applicable averaging limit.***

(1) With respect to each property for which a producer or importer has elected to be subject to the averaging limit in section 2262, within 90 days before or after the start of physical transfer from a production or import facility of any final blend of California gasoline to

which a producer has assigned a designated alternative limit for the property exceeding the applicable averaging limit in section 2262, the producer or importer shall complete physical transfer from the same production or import facility of California gasoline in sufficient quantity and with a designated alternative limit sufficiently below the applicable averaging limit in section 2262 to fully offset the extent to which the gasoline exceeded the applicable averaging limit in section 2262. In the case of benzene, olefins, or aromatic hydrocarbons, the total volume of benzene, olefins, or aromatic hydrocarbons in excess of the averaging limit must be offset within the specified time period; the total mass of sulfur and the degree gallons of T50 and T90 in excess of the averaging limit must be similarly offset.

For example, within 90 days before or after the start of physical transfer from a production or import facility of any final blend of California gasoline to which a producer has assigned a designated alternative limit for olefin content exceeding 4.0 percent by volume, the producer or importer shall complete physical transfer from the same production or import facility of California gasoline in sufficient quantity and with a designated alternative limit sufficiently below 4.0 percent by volume to offset the volume of olefins in excess of a limit of 4.0 percent by volume.

(2) A producer or importer may enter into a protocol with the Executive Officer under which the producer or importer is allowed to have up to ~~three~~ six separate averaging banks at a single production or import facility, applicable to operationally distinct products (e.g. different grades of gasoline or oxygenated and nonoxygenated). The offset requirements will apply independently for each separate averaging bank. Once averaging is selected for a particular product, the compliance scheme for that product may only be changed if the change meets the applicable criteria and conditions in sections 2264.2 and 2265(c) with respect to that product. The protocol shall specify how the requirements in section (a)(2) and (c)(1) will be applied to the producer's or importer's particular operations and the separate averaging banks. In order to enter into the protocol, the Executive Officer must determine that application of the requirements under the protocol will not be less stringent or enforceable than application of the express terms of sections (a)(2) and (c). Any such protocol shall include the producer's or importer's agreement to be bound by the terms of the protocol.

*[**Commentary:** Allowing a refiner to maintain up to six averaging banks at a refinery is appropriate to permit Executive Officer approval under appropriate circumstances of separate banks of oxygenated and nonoxygenated regular, mid-grade and premium gasoline.]*

(d) ***Designated alternative limits for PM alternative gasoline formulations.*** The producer or importer of a final blend of California gasoline that is subject to the PM averaging compliance option for one or more properties may assign a designated alternative limit to the final blend

by satisfying the notification requirements of section 2264(a). The producer or importer of such a final blend shall be subject to all of the provisions of this section 2264, except that, with respect to that final blend, the PM averaging limit (if any) for each property subject to the PM averaging compliance option shall replace any reference in this section 2264 to the averaging limit specified in section 2262.

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).

Amend section 2265(a)(2), title 13, California Code of Regulations, to read as follows:

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 adopted June 16, 2000, and last amended [Insert date of amendment] , 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, 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.

* * * *

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).

*[**Commentary:** Updating the "last amended date of the CaRFG3 Predictive Model Procedures is necessary as the staff is proposing clarifying language to page 12 of that document, providing that:*

"The exhaust and evap model option may only be used for final blends of California gasoline or CARBOB where some part of the final blend is physically transferred from its production or import facility during the Reid vapor pressure control period for the production or import facility set forth in section 2262.4, title 13, California Code of Regulations, or within 15 days before the start of such period."]

Amend section 2266, title 13, California Code of Regulations, to read as follows:

Section 2266. Certified Gasoline Formulations Resulting in Equivalent Emission Reductions Based on Motor Vehicle Emissions Testing.

(a) ~~Certification of alternative gasoline formulations~~ ***Certification of test-certified alternative gasoline formulations*.** Following application by a producer or importer, the executive officer may certify, and identify alternative specifications for, a~~n~~ test-certified alternative gasoline formulation pursuant to the Air Resources Board's "California ~~Test~~ Procedures for Evaluating Alternative Specifications for Gasoline Using Vehicle Emissions Testing," as ~~adopted September 18, 1992~~ last amended [Insert date of amendment], which is incorporated herein by reference.

(b) ~~Prohibited activities regarding alternative gasoline formulations~~ ***Prohibited activities regarding test-certified alternative gasoline formulations*.**

(1) 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 pursuant to section (c) as a~~n~~ test-certified alternative gasoline formulation, if it fails to conform with any of the alternative specifications identified in the certification order for the formulation, as determined in accordance with the test methods identified in the certification order.

(2) A producer or importer who has reported a final blend of gasoline as a~~n~~ test-certified alternative gasoline formulation shall not be subject to section 2262.3(b) or (c), section 2262.4(b), and section 2262.5(c).

(c) ~~Notification regarding sales and supplies of alternative gasoline formulations~~ ***Notification regarding sales and supplies of a test-certified alternative gasoline formulation*.** A producer or importer intending to sell or supply a final blend of California gasoline from its production facility or import facility as a~~n~~ test-certified alternative gasoline formulation shall notify the executive officer in accordance with this section (c). The notification shall identify the final blend and the identification name of the test-certified alternative gasoline formulation. The notification shall be received by the executive officer at least 12 hours before start of physical transfer of the final blend from the production or import facility. A producer or importer intending to have a series of its final blends be a specific test-certified alternative gasoline formulation may enter into a protocol with the executive officer for reporting such blends as long as the executive officer reasonably determines the reporting under the protocol would provide at least as much notice to the executive officer as notification pursuant to the express terms of this section (c).

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).

*[**Commentary:** The proposed modifications to the former "California Test Procedures for Alternative Specifications for Gasoline" are proposed so that the vehicle testing mechanism can be used for equivalency with the CaRFG3 standards as well as the CaRFG2 standards. The test procedure modifications are also being made available for supplemental comment. The post-hearing change in nomenclature in this section is explained in the commentary to section 2260(a)(35).]*

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. ***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.

*[**Commentary:** The post-hearing addition of this subsection has no substantive effect, but its addition means that complex sentences in other subsections can be shortened somewhat.].*

~~1.~~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, ~~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.~~3. 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 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.

*[**Commentary:** This post-hearing modification more clearly reflects the intended effect of the amendments.]*

(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~~ limits for the final blend shall be determined in accordance with the "Procedures for Using the California Model for California Reformulated Blendstock for Oxygenate Blending (CARBOB)," as adopted ***[Insert date of adoption]*** . The ~~final blend's~~ CARBOB's compliance with the assigned CARBOB ~~alternative specification~~ limit for a property shall constitute ~~the final blend's~~ compliance with ~~that property's assigned~~ the corresponding finished gasoline limit – be it a section 2262 flat limit, PM flat limit, ~~designated alternative 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.

*[**Commentary:** These post-hearing modifications to the first two sentences, in conjunction with modifications to the CARBOB Procedures, allow a producer or importer to use the CARBOB Model whether or not the Predictive Model*

mechanism is being used. This subsection is not used to determine compliance with designated alternative limits, which are addressed in section 2266.5(a)(5). The post-hearing addition of the last sentence results from the fact that, as a consequence of the RVP term in the T50 CARBOB Model, the predicted T50 of the final blend of oxygenated gasoline decreases as the RVP of the CARBOB increases. Thus, while there are no basic flat or average limits for RVP applicable during the wintertime (non-RVP control period), it is still necessary to specify the RVP of the CARBOB during the wintertime in order to make a prediction for the T50 of the final blend of oxygenated gasoline. The RVP value that is used in making this prediction becomes a minimum allowable RVP for the particular blend of wintertime CARBOB. That is, during the non-RVP control period, the CARBOB produced by the refiner is required to have an RVP greater than or equal to the value used in the T50 CARBOB model. This ensures that the final blend of oxygenated gasoline has a T50 less than or equal to that predicted by 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.***

~~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. However, where the designated range for oxygen from ethanol is between 1.8 wt.% and 2.2 wt.% and includes 2.0 wt.%, 5.7 vol.% ethanol shall be added, and where the designated range for oxygen from ethanol is between 2.5 wt.% and 2.9 wt.% and includes 2.7 wt.%, 7.7 vol.% ethanol shall be added.~~ oxygen that is no greater than 0.4 wt.% and denatured ethanol as the oxygenate, 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:

$$\text{Vol.\% Denatured Ethanol} = \frac{59.86}{(21.88/\ \text{wt.\% oxygen}) - 0.0604}$$

Where the producer or importer has in accordance with section (b)(1)(C) 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.

*[**Commentary:** These are post-hearing modifications designed to make the handblending requirements more practical. The provisions in the original proposal on the amount of oxygenate to be added when the oxygen range is 1.8 to 2.2 wt.% or 2.5 to 2.9 wt.% have been modified so that the basic principle applies wherever there is a range of no more than 0.4 wt.%. This provides additional flexibility. The equation is based on the equation that was used in an earlier CARBOB model in which percent ethanol, which was entered into the model, was converted to percent oxygen. The equation assumes that the denaturant concentration of the ethanol is 4.76 vol.% (the maximum allowed), the specific gravity of pure ethanol is 0.794, and the specific gravity of the CARBOB is 0.718. The preexisting provisions on adding the designated minimum amount of oxygen in other provisions are too constraining because the weight percent of oxygen added by a given volume percent of ethanol can vary due to differences in gravity and the characteristics of the denaturant.. Despite best efforts, a producer may handblend in an amount of denatured ethanol that results in an oxygen level below or above the minimum designated amount. The modifications permit needed leeway.]*

~~(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.~~

(D)~~2.~~ ***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, 2002 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, 2002, 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:	1.70 volume percent

2. ***Default denatured ethanol characteristics on or after December 31, 2002 when the CARBOB Model is not used.***

~~a.~~ Except as provided in section (a)(2)~~(C)2.b.~~(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~~, denatured ethanol used as the oxygenate must have the following properties~~ on or after December 31, 2002:

Sulfur content:	3 - 10 parts per million
Benzene content:	0 - 0.06 volume percent
Olefin content:	0 - ~~0.05~~ 0.5 volume percent
Aromatic hydrocarbon content:	0 - 1.70 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.***

~~b.~~a. With respect to a final blend of CARBOB supplied from its production or import facility prior to December 31, 2002, ~~A~~ the producer or importer ~~may elect to~~ must specify the properties of the oxygenate used in determining whether ~~a~~ the final blend of CARBOB complies with the ~~standards~~ applicable ~~to~~ California gasoline standards ~~when it is supplied from the production facility or import facility~~, 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, 2002, 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 CARBOB model in connection with the final blend, ~~In this case~~ the oxygenate used in oxygenate

blending and testing in accordance with section (a)(2)(C)1. must ~~meet the ranges of specifications~~ 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:	0.10 volume percent
Aromatic hydrocarbon content:	1.00 volume percent

~~c.~~b ***Maintaining oxygenate samples for use in compliance testing.*** A producer or importer who is ~~electing to~~ specifying the properties of the oxygenate used in a final blend of CARBOB in accordance with the preceding section ~~(a)(2)(C)2.b.~~ (a)(2)(D)3.a. must maintain at the production or import facility, while the final blend is at the facility, ~~quantities of~~ oxygenate meeting the required specifications in quantities that are sufficient to enable state board inspectors to use the oxygenate in compliance determinations.

*[**Commentary:** The pre-hearing modifications make several changes. First, the provisions expressly encompass CARBOB being supplied by a producer or importer using the CARBOB Model. Second, the "default" denatured ethanol specifications are made applicable only on or after December 31, 2002, because denatured ethanol sold prior to that time is not required to meet the section 2262.9(a)(1) standards. Prior to that time, the specifications of the denatured ethanol for which the CARBOB is designed must always be identified. Third, to provide greater flexibility, particularly before 2003, producers and importers are allowed to specify a "dirtier" denatured ethanol to be blended with a particular batch of CARBOB, as well as "cleaner" ethanol. Post-hearing modifications revise the last sentence of section (a)(2)(D)3.a for clarity, and correct a section reference in section (a)(2)(D)3.b.]*

~~(D)~~ (E) ***Protocol for ~~D~~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)-~~(C)~~(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, ~~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~~ 1 minus the designated ~~minimum~~ maximum volume percent, expressed as a decimal fraction, that 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)~~.

*[**Commentary:** The post-hearing modification changing "minimum" to "maximum" corrects a drafting error in the original regulations. The intent has always been that there would be a violation under this subsection only if an exceedance would necessarily occur under conditions most favorable to the refiner. Thus the maximum rather than minimum dilution value should be used in the equation. The other modifications make clarifying nonsubstantive changes.]*

(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.*** 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.*** 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.*** 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 Blendstock for Oxygenate Blending (CARBOB)," as adopted ***[Insert date of adoption]*** . 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.*** 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).

*[**Commentary**: These modifications are necessary because the original proposal did not provide a mechanism for assigning a DAL for CARBOB when the producer or importer has elected to use the CARBOB model]*

~~(5)~~ (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 ~~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~~ Whenever downstream CARBOB designated for ethanol blending has already been supplied from its production or import facility, ~~where the CARBOB exceeds the following CARBOB cap limits~~ the CARBOB's compliance with the cap limits for California gasoline may be determined by applying the CARBOB cap limits in the following table based on the designated volume of ethanol to be added:

Property	***CARBOB Cap Limits***					
	~~***2.0 - 5.8 vol.% Ethanol Range***~~		~~***5.9 - 7.8 vol.% Ethanol Range***~~		~~***7.8 - 10 vol.% Ethanol Range***~~	
	~~***CaRFG2***~~	~~***CaRFG3***~~	~~***CaRFG2***~~	~~***CaRFG3***~~	***CaRFG2***	***CaRFG3***
Reid Vapor Pressure[1] (pounds per square inch)	~~5.78~~	~~5.99~~	~~5.78~~	~~5.99~~	5.78	5.99
Sulfur Content (parts per million by weight)	~~85~~	~~63[2]~~	~~86~~	~~65[2]~~	89	66[2]
		~~31[2]~~		~~32[2]~~		32[2]
Benzene Content (percent by volume)	~~1.27~~	~~1.16~~	~~1.30~~	~~1.19~~	1.33	1.22
Aromatics Content (percent by volume)	~~31.7~~	~~37.0~~	~~32.4~~	~~37.8~~	33.1	38.7
Olefins Content (percent by volume)	~~10.6~~	~~10.6~~	~~10.8~~	~~10.8~~	11.1	11.1
T50 (degrees Fahrenheit)	~~226~~	~~226~~	~~228~~	~~228~~	~~226~~ 232[3]	~~226~~ 232[3]
					237[3]	237[3]
T90 (degrees Fahrenheit)	~~333~~	~~333~~	~~334~~	~~334~~	335	335

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).

3 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.

*[**Commentary**: The originally proposed CARBOB cap limits for T50 reflected the range of possible values that could result using from gasolines meeting summertime Reid vapor pressure limits. The modifications add separate limits for gasoline not subject to the Reid vapor pressure limits, based on analysis of possible formulations having a Reid vapor pressure of 13.5 lbs. for the oxygenated gasoline.*

Consolidation of the table into two columns is a post-hearing modification. Since downstream fungibility of CARBOB will now be based on common designations of oxygen content rather than the amount of oxygenate to be added, the staff evaluated whether to base the CARBOB caps on the weight percent oxygen content rather than

the volume percent oxygenate content. Ultimately, staff concluded that there was little enough variation in the proposed caps for the three levels of oxygenation that it would be preferrable for the regulation to identify one set of CARBOB caps for all oxygenation levels. This will make the regulation simpler and easier to enforce without an appreciable reduction in stringency.]

(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~~ Whenever downstream CARBOB designated for ethanol blending has already been supplied from ~~the~~ its 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 CARBOB's compliance with the cap limits for California gasoline may be determined by adding the specified type and amount of oxygenate ~~is added~~ to a representative sample of the CARBOB and determining 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. However, where the designated range for oxygen from ethanol is between 1.8 wt.% and 2.2 wt.% and includes 2.0 wt.%, 5.7 vol.% ethanol shall be added, and where the designated range for oxygen from ethanol is between 2.5 wt.% and 2.9 wt.% and includes 2.7 wt.%, 7.7 vol.% ethanol shall be added. Denatured ethanol used as the oxygenate must have the properties set forth in section (a)(2)(C)2.a.

(C) ***Protocols.*** A person may enter into a protocol with the ~~E~~executive ~~O~~officer for the purpose of identifying more stringent specifications for the denatured ethanol used pursuant to section (a)~~(5)~~(6)(B), or different CARBOB cap limits under section (a)~~(5)~~(6)(A), if the ~~E~~executive ~~O~~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.

*[**Commentary**: In post-hearing modifications, the texts of sections 2266.5(a)(6)(A) and (B) have been modified to make them structurally consistent with the other provisions of section 2266.5(a) – the regulatory text establishes how the underlying prohibitions of the CaRFG3 regulations apply to CARBOB, rather than establishing separate prohibitions.]*

(b) ***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. ~~e~~Each of the CARBOB ~~alternative specifications~~ limits that will apply to the final blend ~~(along with the information required under section 2265(a)(2))~~ 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));

*[**Commentary:** The post-hearing modifications to section (b)(1)(C) are necessary to make the notification requirements work apprpropriately for CARBOB subject to averaging for one or more properties. Where averaging is being used, the CARBOB is subject either to the CARBOB DAL assigned pursuant to section (a)(5)(B) or, if no DAL is assigned, the averaging or PM averaging limit for the CARBOB. The other post-hearing modifications make nonsubstantive changes to reflect a change in terminology and the fact that the CARBOB Model may be used whether or not the Predictive Model is used.]*

(D) If the producer or importer is ~~electing to specify~~ specifying, pursuant to section (a)(2)(D)3., the properties of the oxygenate to be added downstream by the oxygenate

blender ~~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))~~:

~~Sulfur content:~~	~~Within a range of 5 parts per million~~
~~Benzene content:~~	~~Within a range of 0.06 volume percent~~
~~Olefin content:~~	~~Within a range of 0.10 volume percent~~
~~Aromatic hydrocarbon content:~~	~~Within a range of 1.00 volume percent~~

Maximum sulfur content (nearest part per million by weight)
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)

*[**Commentary:** The original references to ranges have been deleted because they could be construed as unnecessarily prohibiting the oxygenate blender from adding a denatured ethanol that is cleaner than necessary. The new provisions at the end of section 2266.5(a)(2)(D)3.a. assure that the ethanol used in hand-blending will not be inappropriately "clean." The post-hearing modification to the first line reflects the fact that this requirement is mandatory before December 31, 2002. Other deletions make the text less complex without affecting the meaning.]*

~~(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)~~ 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 ~~a range of~~ an oxygen content that ~~is identical to~~ meets 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)~~ subject to TC alternative specifications, 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~~ meets the oxygen content alternative specification ~~identified in the certification order~~ for the ~~formulation~~ final blend;

*[**Commentary:** The nonsubstantive post-hearing modifications reflect changes in terminology and clarify the underlying intent of the provisions.]*

~~(D)(F) Where the producer or importer is using an averaging compliance option or a PM averaging compliance option for any property, T~~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.~~

*[**Commentary**: This provision is not longer necessary because all of the necessary requirements are in modified section 2266.5(a)(5), which incorporates volume reporting requirements in section 2264(a).]*

(2) ***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 (a) California gasoline rather than CARBOB, or ~~(B)~~(b) CARBOB subject to a new notification made pursuant to section (b)(1).

*[**Commentary**: The post-hearing modification deleting the reference to section (b)(1)(A) is appropriate because the reported identity of the initial blend will not be applicable to subsequent blends. Note that as modified this provision does not apply to reported DALs or batch volumes; this treatment is parallel to the situation with finished gasoline being supplied from a production or import facility.]*

~~(2)~~(3) ***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)~~(2)~~(3) have been met, timely notification shall be deemed to have occurred.

~~(3)~~(4) ***Protocols.*** 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 ~~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)~~(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 ~~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).

~~(3)~~(2) ***Maintaining records.*** 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)~~(3) ***Production of records.*** ~~a~~An ~~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 an ~~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)~~(4) ***Protocols.*** 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.

*[**Commentary:** The modifications eliminate the requirement that producers sample and analyze each final blend of CARBOB, because the ARB Enforcement staff believes that the requirement has only marginal utility. With the modification, the CARBOB testing requirements for a producer would be the same as they would if finished California gasoline were being supplied – sampling and testing would only be required if an averaging or PM averaging compliance option were being used. Staff is not recommending elimination of the CARBOB testing requirements for importers because the transient nature of importer activities make it more difficult for inspectors to monitor compliance].*

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

(1) ***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) ~~s~~States that the CARBOB does not comply with the standards for California gasoline without the addition of oxygenate, ~~and~~

(B) Identifies the applicable flat limit, PM alternative specification, or TC alternative specification for oxygen, and

~~(B)~~(C) ~~i~~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.*** 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.

*[**Commentary:** A post-hearing modification adds section 2266.5(d)(1)(B), requiring that the product transfer document for a batch of CARBOB identify the applicable specification for oxygen. This is needed so that downstream entities will know the other CARBOBs with which the batch can be commingled pursuant to modified section 2266.5(f)(1)(B)]*

(e) ***Restrictions on transferring CARBOB.***

(1) ***Required agreement by transferee.*** 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.*** 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) ***Basic prohibition.*** 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.***

1. The CARBOB may be blended with ~~O~~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~~.

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.*** The CARBOB may be blended with ~~O~~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.

*[**Commentary:** Post-hearing modifications to the structure of section 2266.5(f)(1) make the provisions easier to understand. Post-hearing modifications to section 2266.5(f)(1)(A) make clear that only ethanol designed for a particular downstream CARBOB may be blended with that CARBOB. This was implicit in the standards for ethanol in section 2262.9, since the purpose of the ethanol standards was to assure that ethanol meeting those standards will be used in oxygenated California gasoline.*

A post-hearing modification limits the downstream commingling of different batches of CARBOB to CARBOBs designated for blending with identical levels or ranges of oxygen, rather than with identical levels or ranges of oxygenate. This is designed to increase the fungibility of downstream CARBOB. Because of tax considerations and the structure of the CARBOB provisions, it is expected that most batches of CARBOB will be designated for blending to one of three ranges of oxygen from ethanol – 1.8-2.2 wt.%, 2.5-2.9 wt.%,

or 3.3-3.7 wt.% oxygen. But for CARBOBs within one of these three oxygen ranges, producers and importers may choose to designate slightly different minimum levels of oxygenate – ethanol – to be added. Under the preexisting regulations, a batch of CARBOB designated for blending with 5.4 vol.% ethanol could not be commingled downstream with a batch of CARBOB designated for blending with 5.7 vol.% ethanol – even where both batches are identically designated for oxygen ranges of 1.8-2.2 wt.%.. Since batches of CARBOB are presumed to be compliant when any amount of oxygen within the specified range is added, the approach in the preexisting regulations is needlessly restrictive.

The addition of the new last clause in section 2266.5(f)(1)(B) is necessitated by the new provisions allowing producers and importers to specify the characteristics of the denatured ethanol to be used as the oxygenate. The clause prohibits the combining of CARBOBs designed for denatured ethanols having different specified qualities, since the amendments will permit a wide range of potential denatured ethanol blends to be added to particular blends of CARBOB.]

(C) ***CARBOB specified for different ~~ethanol~~ oxygen level.*** 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 ~~ethanol~~ oxygen, and the change in ~~ethanol~~ oxygen content will not exceed ~~3~~ 1.1 weight percent of the oxygenated gasoline blend;

~~3. Prior to adding the new CARBOB, the volume of the initial CARBOB in the tank is drawn down to no more than 10 percent, and~~

~~4~~3. The volume of the new CARBOB that is added to the tank is ~~as large as possible taking into account availability of the new CARBOB~~ at least four times as large as the volume of the initial CARBOB in the tank, and

~~5~~4. The sulfur content of the new CARBOB added to the tank is no more than 12 parts per million.

*[**Commentary:** The modifications to originally proposed section (f)(1)(C)3. and 4. will provide more flexibility for distributors using this mechanism. Additional analysis by staff indicates that the modifications will not have an adverse emissions impact. Post-*

hearing modifications changing the "ethanol" references to "oxygen" reflect the fact that the CARBOB commingling restrictions will now be based on changes in the specified weight percent oxygen level (or range), instead of changes in the volume percent ethanol to be added. The rationale for this change in approach is provided in the immediately preceding commentary. An oxygen content of 1.1 wt.% is equivalent to an ethanol content of 3.02 vol.% using the factors in the equation in section 2266.5(a)(2)(C).]

(D) ***California gasoline not subject to RVP standard.*** Where a person is changing from California gasoline to CARBOB~~, or from CARBOB to California gasoline,~~ 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. If the person is adding CARBOB to California gasoline,~~

~~a. Prior to adding the CARBOB, the volume of the California gasoline in the tank is drawn down to no more than 10 percent, and~~

~~b. The volume of CARBOB that is added to the tank is as large as possible taking into account availability of that type of CARBOB;~~

~~3.~~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.

*[**Commentary:** The modifications eliminate all provisions regarding a change in service from CARBOB to California gasoline because additional staff analysis using the Predictive Model indicates that in most cases there would be an exhaust emissions increase over flat limit levels.*

The requirement that the tank heel be brought down to no more than 10 percent prior to a change from California gasoline to CARBOB would be eliminated; the revised staff analysis using the Predictive Model indicates that there will not be an exhaust emissions increase over flat limit levels at any volume ratio.]

(2) ***Protocols.*** 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) ***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.*** 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) ***Issuance of certificate.*** 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) ***Submittal of updated information.*** 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 in accurate.

(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 ~~bull~~ 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 ~~a~~ 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.***

(1) ***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) ***Exception.*** 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.

(3) ***Protocols.*** Notwithstanding section (i)(1), a person may add nonoxygenate 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 ~~D~~d~~uring the RVP S~~s~~eason on ~~B~~b~~lending ~~G~~g~~asoline ~~C~~c~~ontaining ~~E~~e~~thanol ~~W~~w~~ith California ~~G~~g~~asoline ~~N~~n~~ot ~~C~~c~~ontaining ~~E~~e~~thanol.***

(1) ***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.*** 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, 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).

Amend section 2270(a), title 13, California Code of Regulations, to read as follows:

Section 2270. Testing and Recordkeeping.

(a) (1) The requirements of this section (a) shall apply to each producer and importer that has elected to be subject to an averaging limit in section 2262, or to a PM averaging limit. The references to sulfur content shall apply to each producer or importer that has elected to be subject to section 2262.2(c), or to a PM averaging limit for sulfur. The references to benzene content shall apply to each producer or importer that has elected to be subject to section 2262.3(c), or to a PM averaging limit for benzene. The references to olefin content shall apply to each producer or importer that has elected to be subject to the section 2262 averaging limit for olefin content, or to a PM averaging limit for olefin content. The references to T90 shall apply to each producer or importer that has elected to be subject to the section 2262 averaging limit for T90, or to a PM averaging limit for T90. The references to T50 shall apply to each producer or importer that has elected to be subject to the section 2262 averaging limit for T50, or to a PM averaging limit for T50. The references to aromatic hydrocarbon content shall apply to each producer or importer that has elected to be subject to the section 2262 averaging limit for aromatic hydrocarbon content, or to a PM averaging limit for aromatic hydrocarbon content.

(2) Each producer shall sample and test for the sulfur, aromatic hydrocarbon, olefin and benzene content, T50 and T90 in each final blend of California gasoline which the producer has produced, by collecting and analyzing a representative sample of gasoline taken from the final blend, using the methodologies specified in section 2263. If a producer blends gasoline components directly to pipelines, tankships, railway tankcars or trucks and trailers, the loading(s) shall be sampled and tested for the sulfur, aromatic hydrocarbon, olefin and benzene content, T50 and T90 by the producer or authorized contractor. The producer shall maintain, for two years from the date of each sampling, records showing the sample date, identity of blend sampled, container or other vessel sampled, final blend volume, sulfur, aromatic hydrocarbon olefin and benzene content, T50 and T90. All gasoline produced by the producer and not tested as California gasoline by the producer as required by this section shall be deemed to have a sulfur, aromatic hydrocarbon, olefin and benzene content, T50 and T90 exceeding the applicable averaging limit standards specified in section 2262, or exceeding the comparable PM averaging limits if applicable, unless the producer demonstrates that the gasoline meets those standards and limits.

(3) Each importer shall sample and test for the sulfur, aromatic hydrocarbon, olefin and benzene content, T50 and T90 in each ~~shipment~~ final blend of California gasoline which the importer has imported by tankship, pipeline, railway tankcars, trucks and trailers, or other means, by collecting and analyzing a representative sample of the gasoline, using the methodologies specified in section 2263. The importer shall maintain, for two years from the date of each sampling, records showing the sample date, product sampled, container or other vessel sampled, the volume of the ~~shipment~~ final blend, sulfur content, aromatic hydrocarbon, olefin and benzene content, T50 and T90. All gasoline imported by the importer and not tested as California gasoline by the importer as required by this section shall be deemed to have a sulfur, aromatic hydrocarbon, olefin and benzene content, T50 and T90 exceeding the applicable averaging limit standards specified in section 2262, or exceeding the comparable PM averaging limit(s) if applicable, unless the importer demonstrates that the gasoline meets those standards and limit(s).

* * * *

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).

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

[Note – At the November 16, 2000 hearing, the Board approved staff's recommendation that additional modifications be added applicable to a small refiner operating a small refinery that has been shut down since the start of the CaRFG2 requirements in March 1996. Such a refiner would be allowed for the first two years of the CaRFG3 program (12/31/02 – 12/30/04) to meet the CaRFG2 standards (without the use of MTBE) rather than the CaRFG3 standards as long as the refiner offsets any adverse emissions with cleaner diesel fuel. It is anticipated that CENCO Refining Co., owner of the former Powerine refinery in Santa Fe Springs, could qualify under these provisions. The regulatory language implementing this element, and an environmental analysis, will be released with a subsequent notice of a 15-day period for comment on the modifications.]

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).

Amend section 2273, title 13, California Code of Regulations, to read as follows:

Section 2273. Labeling of Equipment Dispensing Gasoline Containing MTBE.

* * * *

(b) ***Residual levels of MTBE.***

(1) The labeling requirements in section 2273(a) do not apply to equipment dispensing gasoline from a storage tank containing gasoline having an MTBE content of less than 0.6 percent by volume, as determined by American Society of Testing and Materials (ASTM) Test Method D 4815-~~94a~~99, which is incorporated herein by reference, or any other test method determined by the executive officer to give equivalent results.

* * * *

(d) ***Deliveries of gasoline to retail outlets.***

(1) Any person delivering gasoline to a retail gasoline outlet shall provide to the outlet operator or responsible employee, at time of delivery of the fuel, an invoice, bill of lading, shipping paper, or other documentation which states whether the gasoline does or does not contain 0.6 percent by volume or more MTBE, and which may identify the volumetric amount of MTBE in the gasoline. For purposes of determining compliance with this section 2273(d), the volumetric MTBE content of gasoline shall be determined by ASTM Test Method D 4815-~~94a~~99, which is incorporated herein by reference, or any other test method determined by the executive officer to give equivalent results.

* * * *

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, 43000, 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).

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

Section 2282. Aromatic Hydrocarbon Content of Diesel Fuel

* * * *

(b) ***Definitions.*** For the purposes of this section:

* * * *

(19) "Small refiner" means any refiner who owns or operates a refinery in California that:

(A) Has and at all times had since January 1, 1978, a crude oil capacity of not more than ~~50,000~~ 55,000 barrels per stream day;

(B) Has not been at any time since September 1, 1988, owned or controlled by any refiner that at the same time owned or controlled refineries in California with a total combined crude oil capacity of more than ~~50,000~~ 55,000 barrels per stream day; and

(C) Has not been at any time since September 1, 1988, owned or controlled by any refiner that at the same time owned or controlled refineries in the United States with a total combined crude oil capacity of more than 137,500 barrels per stream day.

*[**Commentary:** The modification to section 2282(b)(19) makes the size cut-off for small refiners in the diesel aromatics regulation identical to the size cut-off in section 2260(a)(32)(A).]*

* * * *

(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~~A) ***Annual elections.*** No later than December 22 of each calendar year starting with 2002, a small refiner who is also a qualifying small refiner as defined in the CaRFG regulations (section 2260(a)(28.5)) may by notification to the Executive Officer make the following elections:

*[**Commentary**: This is a post-hearing nonsubstantive clarifying modification.]*

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~~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 (equal to 2263 bpd; 828,258 barrels per year in leap years) in place of 2,337,825 barrels per year (equal to 6405 bpd; 2,344,230 in leap years).

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 adjust the aromatics and cetane number of the standards applicable to the small refiner sufficient to offset the potential increased emissions identified pursuant to section 2272(c)(5). In the case of Kern Oil and Refining Co., its exempt volume for the year would be 2,337,825 barrels per year (~~equivalent~~ equal to 6405 bpd; 2,344,230 barrels per year in leap years). 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 0.5 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, or be subject to the designated alternative limit provisions in subsection (d) with all designated alternative limits above 18 percent by volume fully offset in accordance with subsection (d).

*[**Commentary**: The post-hearing modification adding the last clause makes clear that the averaging mechanism can still be used by a small refiner electing this option. The other post-hearing modifications make clarifying nonsubstantive changes.]*

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). The Executive Officer shall adjust the aromatics and cetane number of the standards applicable to the potential volume of small refiner sufficient to offset the potential

increased emissions identified pursuant to section 2272(c)(5). 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 meets the U.S. EPA's standards for diesel fuel for use in motor vehicles in 40 CFR sec. 80.29 as it existed July 1, 2000. 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; 2,930,196 in leap years). 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 3.5 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 100 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~~ or 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: 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, 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).

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

2296. Motor Fuel Sampling Procedures.

* * * *

(a) ~~"Scope."~~ *Scope.*

*[**Commentary**: The format changes in the headings in sections 2296 and 2297 make the headings consistent with those in other ARB fuels regulations, and more reader-friendly.]*

* * * *

(b) ~~"Summary of method."~~ *Summary of method.*

* * * *

(c) ~~"Description of terms."~~ *Description of terms.*

* * * *

(d) ~~"Sample containers."~~ *Sample containers.*

* * * *

(e) ~~"Sampling apparatus"~~ *Sampling apparatus.*

* * * *

(f) ~~"Time and place of sampling."~~ *Time and place of sampling.*

* * * *

(g) ~~"Obtaining samples."~~ *Obtaining samples.*

* * * *

(h) ~~"Handling samples."~~ *Handling samples.*

* * * *

(i) ~~"Shipping samples."~~ *Shipping samples.*

* * * *

(j) ~~"Labeling sample containers."~~ *Labeling sample containers.*

* * * *

(k) ~~"Sampling procedures."~~ *Sampling procedures.*

* * * *

(2) "Tap sampling." The tap sampling procedure is applicable for sampling liquids of 26 pounds (1.83 kgf/cm^2) 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 or distillation analysis, use the assembly as shown in Figure 3.~~ When obtaining a sample for other than RVP or 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 used.

NOTE: If RVP is more than 16 pounds (1.12 kgf/cm^2) but not more than 26 pounds (1.83 kgf/cm^2) 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.

(A) "Apparatus."

1. "Tank taps." The tank should be equipped with at least three sampling taps placed equidistant throughout the tank height ~~and extending at least three feet (one m) inside the tank shell~~. On tanks that are not equipped with floating roofs, each sample tap should extend into the a minimum of 10 cm (4 in.). A standard 1/4 inch pipe with suitable valve is satisfactory.

* * * *

[The modification to section 2296(k)(2) corrects a printing error in Barclays California Code of Regulations. In addition, on the sixth line, "for RVP distillation analysis" is changed to "for RVP or distillation analysis" to correctly reflect the text in Barclays California Code of Regulations.

The modification to section 2296(k)(2)(A) adds a necessary qualification that is in section 13.6.2.1 of the current ASTM sampling procedure D 4057-95^{e1}.]

(*l*) ~~"Special Precautions and instructions for RVP Sampling."~~ *Special Precautions and instructions for RVP Sampling.*

* * * *

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

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.

(a) ~~Scope~~ *Scope.*

* * * *

(b) ~~Summary of Test Method~~ *Summary of Test Method.*

* * * *

(c) ~~Apparatus~~ *Apparatus.*

* * * *

(d) ~~Sampling~~ *Sampling.*

(1.0) Obtain a sample in accordance with ~~of T~~title 13, California Code of Regulations, section ~~2261~~ 2296.

*[**Commentary**: This nonsubstantial post-hearing modification corrects the section reference. When the sampling provisions in section 2261 were renumbered as section 2296 in 1991, the change was not reflected in section 2297(d) (which itself had been renumbered from section 2262(d)). See Barclays History Note 1 to section 2296, regarding changes without regulatory effect filed September 17, 1991.]*

* * * *

(e) ~~Preparation of Apparatus~~ *Preparation of Apparatus.*

* * * *

(f) ~~Calibration~~ *Calibration.*

* * * *

(g) ~~Quality Control Checks~~ *Quality Control Checks.*

* * * *

(h) ~~Procedure~~ *Procedure.*

* * * *

(i) ~~Calculation~~ *Calculation.*

* * * *

(j) ~~Report~~ *Report.*

* * * *

(k) ~~Precision and Bias~~ *Precision and Bias.*

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

(1.1) ~~Repeatibility~~ *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:

1. Grabner Instruments,	
Model: CCA-VP (laboratory Grabner)	0.084 psi
2. Grabner Instruments,	
Model: CCA-VPS (portable Grabner)	0.084 psi
3. Stanhope-Seta Limited	
Model: Setavap	0.10 psi

(1.2) ~~Reproducibility~~ *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 reproducibility value for this method shall be 0.30 psi.~~ are:

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

(2.0) ~~Bias~~ *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 D 323-58. 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.

*[**Commentary:** The modifications to the repeatability of the Grabner instruments correct errors in the original proposal.]*

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).