

**PROPOSED MODIFICATIONS TO THE PROPOSED REGULATION ORDER,
SHOWING THE COMPLETE PROPOSED REGULATION ORDER AS MODIFIED**

**AMENDMENTS TO THE CALIFORNIA PHASE 3 GASOLINE (CaRFG3)
REGULATIONS TO REFINE THE PROHIBITIONS OF MTBE AND SPECIFIED
OTHER OXYGENATES IN CALIFORNIA GASOLINE STARTING
DECEMBER 31, 2003**

Note: The preexisting regulation text is set forth below in normal type. The originally proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. The subsequent modifications proposed by staff are shown in double underline to indicate additions and ~~double strikeout~~ to indicate deletions. Amendments approved by the Air Resources Board at a July 25, 2002 hearing (with modifications made available for comment September 17, 2002) but not yet filed with the Office of Administrative Law are shown in dotted underline to show additions and ***bold italicized strikeout*** to show deletions. The symbol “* * * * *” means that intervening text not proposed to be amended is not shown. Subsection headings in italics are to be italicized when printed in Barclays California Code of Regulations; the changes shown to section headings make corrections to the current version of the regulations in Barclays.

1. Add section 2260(a)(26.5), title 13, California Code of Regulations, to read as follows:

(26.5)“Produced at a California production facility with the use of any oxygenate other than ethanol or MTBE” means produced at a California production facility in part by either (i) adding at the California production facility any oxygenate, other than ethanol or MTBE, in neat form to the California gasoline or to a blending component used in the gasoline; or (ii) ~~by~~ using a blending component that contained greater than 0.10 weight percent total oxygen from oxygenates other than ethanol or MTBE when it was supplied to the California production facility.

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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).

2. Amend section 2261(b)(3), title 13, California Code of Regulations, to read as follows:

Section 2261. Applicability of Standards; Additional Standards.

* * * * *

(b) *Applicability of the CaRFG Phase 3 Standards.*

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(3) *Early Compliance with the CaRFG Phase 3 Standards Before December 31, ~~2002~~ 2003.*

- (A) Any producer or importer wishing to supply from its production or import facility, before December 31, ~~2002~~ 2003, any final blends of gasoline subject to the CaRFG Phase 3 standards instead of the CaRFG Phase 2 standards may notify the executive officer of its wish to do so. The notification shall include all of the following:
1. The approximate date by which it intends to begin supplying from its production or import facility gasoline complying with the CaRFG Phase 3 standards if permitted to do so;
 2. A reasonably detailed demonstration of the producer's or importer's ability and plans to begin supplying from its production or import facility substantial quantities of one or more grades of gasoline meeting the CaRFG Phase 3 standards on or after the date specified;
- (B)1. Within 15 days of receipt of a request under section 2261(b)(3)(A), the executive officer shall notify the producer or importer making the request either that the request is complete, or specifying what additional information is necessary to make the request complete.
2. Within 15 days of notifying the producer or importer that the request is complete, the executive officer shall either grant or deny the request. If the request is granted the executive officer shall specify the date on which producers and importers may start to supply from their production or import facilities final blends that comply with the CaRFG Phase 3 standards. The executive officer shall grant the request if he or she determines it is reasonably likely that the producer or importer making the request will start supplying substantial quantities of one or more grades of gasoline complying with the CaRFG Phase 3 standards reasonably soon after the date specified. If the executive officer denies the request, he or she shall provide the producer or importer with a written statement explaining the reason for denial.
 3. Upon granting a request made under section 2261(b)(3)(A), the executive officer shall notify interested parties of the date on which (i) producers and importers will be permitted to start supplying final blends of gasoline complying with the CaRFG Phase 3 standards, and (ii) the CaRFG Phase 2 cap limits for RVP and aromatics will become 7.20 psi and 35.0 volume percent respectively for gasoline downstream of the production or import facility. This notification shall be made by posting the pertinent information on the state board's Internet site, providing electronic mail notification to all persons subscribing to the state board's Fuels-General Internet electronic mail list, and mailing notice to all persons registered as motor vehicle fuel distributors under Health and Safety Code section 43026.

4. With respect to all final blends supplied from a production or import facility from the day specified by the executive officer in granting a request made under section 2261(b)(3)(A) through December 30, ~~2002~~ 2003, any producer or importer may comply with the CaRFG Phase 3 standards that apply starting December 31, ~~2002~~ 2003 as an alternative to the CaRFG Phase 2 standards. Whenever a producer or importer is supplying a final blend subject to the CaRFG Phase 3 standards pursuant to this section 2261(b)(3)(B)4., any notification required by sections 2264.2 or 2265(a) shall indicate that the final blend is subject to the CaRFG Phase 3 standards. When it is sold or supplied from the production or import facility, any no such final blend is subject to the prohibitions in section 2262.6(a)(1) and 2262.6(c) regarding California gasoline produced with the use of MTBE and oxygenates other than ethanol, but is not subject to the prohibition in section 2262.6(a)(2) imposing limits on the concentration of MTBE in California gasoline, may contain MTBE in concentrations greater than 0.60 volume percent, or contain a total of more than 0.10 weight percent oxygen collectively from all of the oxygenates identified in section 2262.6(c)(4) that have not received a determination by the California Environmental Council as described in section 2262.6(c)(1).

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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).

3. Amend section 2262.6, title 13, California Code of Regulations, to read as follows:

Section 2262.6. Prohibition of MTBE and Oxygenates Other Than Ethanol in California Gasoline Starting December 31, ~~2002~~ 2003.

(a) *Basic MTBE prohibitions.*

- (1) Starting December 31, ~~2002~~ 2003, no person shall sell, offer for sale, supply or offer for supply California gasoline which has been produced at a California production facility with the use of in part by either (i) adding at the California production facility any methyl tertiary-butyl ether (MTBE) in neat form to the California gasoline or to a blending component used in the gasoline; or (ii) using a blending component that contained greater than 0.60 volume percent MTBE when it was supplied to the California production facility.
- (2) No person shall sell, offer for sale, supply or offer for supply California gasoline which contains MTBE in concentrations greater than: ~~0.3~~ 0.60 volume percent starting

December 31, ~~2002~~ 2003, 0.30 volume percent starting July 1, 2004, 0.15 volume percent starting December 31, ~~2003~~ ~~2004~~ 2005, and 0.05 volume percent starting ~~December 31, 2004~~ ~~2005~~ July 1, 2007.

(b) *Phase-in of MTBE prohibitions.*

(1) Phase-in of MTBE prohibitions starting December 31, 2003, and 2005. In the first year in which a prohibition applies under section 2262.6(a) starting on December 31, the prohibition shall be phased in as follows:

- (A) Starting December 31, for all sales, supplies, or offers of California gasoline by a producer or importer from its production facility or import facility.
- (B) Starting the following February 14, for all other sales, supplies, offers or movements of California gasoline except for transactions directly involving:
 - 1. the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility, or
 - 2. the delivery of gasoline from a bulk plant to a retail outlet or bulk purchaser-consumer facility.
- (C) Starting the following March 31, for all remaining sales, supplies, offers or movements of California gasoline, including transactions directly involving the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility.

(2) Phase-in of MTBE prohibitions starting July 1, 2004 and 2007. In the first year in which a prohibition applies under section 2262.6(a) starting on July 1, the prohibition shall be phased in as follows

- (A) Starting July 1, for all sales, supplies, or offers of California gasoline by a producer or importer from its production facility or import facility.
- (B) Starting the following August 15, for all other sales, supplies, offers or movements of California gasoline except for transactions directly involving:
 - 1. the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility,
or
 - 2. the delivery of gasoline from a bulk plant to a retail outlet or bulk purchaser-consumer facility.
- (C) Starting the following October 1, for all remaining sales, supplies, offers or movements of California gasoline, including transactions directly involving the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility.

~~(3) (2)~~ (3) *Phase-in for low-throughput fueling facilities.* For the first year in which a prohibition applies under section 2262.6(a)(1), ~~†~~The prohibitions in section (a) starting respectively on December 31, 2003, July 1, 2004, December 31, 2005, and July 1, 2007, shall not apply to transactions directly involving the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility, where the person selling, offering, or supplying the gasoline demonstrates as an affirmative defense that the exceedance of the standard was caused by gasoline delivered to the retail outlet or bulk purchaser-consumer facility prior to February 14 of that year, or delivered to the retail outlet or bulk purchaser-consumer facility directly from a bulk plant prior to March 31 of that year the date on which the delivery became subject to the prohibition pursuant to the phase-in provisions in section (b).

(c) *Use of oxygenates other than ethanol or MTBE in California gasoline on or after December 31, ~~2002~~ 2003.*

(1) Starting December 31, ~~2002~~ 2003, no person shall sell, offer for sale, supply or offer for supply California gasoline which has been produced at a California production facility with the use of any oxygenate other than ethanol or MTBE unless a multimedia evaluation of use of the ~~ether~~ oxygenate in California gasoline has been conducted and the California Environmental Policy Council established by Public Resources Code section 71017 has determined that such use will not cause a significant adverse impact on the public health or the environment.

(2) Starting December 31, 2003, no person shall sell, offer for sale, supply or offer for supply California gasoline which contains a total of more than 0.10 weight percent oxygen collectively from all of the oxygenates identified in section (c)(4).

(3) Starting July 1, 2004, no person shall sell, offer for sale, supply or offer for supply California gasoline which contains a total of more than 0.06 weight percent oxygen collectively from all of the oxygenates identified in section (c)(4).

(4) Covered oxygenates. Oxygen from the following oxygenates is covered by the prohibitions in section 2262.6(c)(1), (2) and (3):

Methanol
Isopropanol
n-Propanol
n-Butanol
iso-Butanol
sec-Butanol
tert-Butanol
Tert-pentanol (*tert*-amylalcohol)
Ethyl *tert*-butylether (ETBE)
Diisopropylether (DIPE)
Tert-amylmethylether (TAME)

(5) The prohibitions in section 2262.6(c)(1) and (2), and in section 2262.6(c)(3), shall be phased in respectively as follows:

(A) Starting December 31, 2003 and July 1, 2004 respectively for all sales, supplies, or offers of California gasoline by a producer or importer from its production facility or import facility.

(B) Starting February 14, 2004 and August 15, 2004 respectively for all other sales, supplies, offers or movements of California gasoline except for transactions directly involving:

1. the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility, or

2. the delivery of gasoline from a bulk plant to a retail outlet or bulk purchaser-consumer facility.

(C) Starting March 31, 2004 and September 30, 2004 respectively for all remaining sales, supplies, offers or movements of California gasoline, including transactions directly involving the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility.

(6) Phase-in for low-throughput fueling facilities. The prohibitions in section 2262.6(c)(1) and (2), and in section 2262.6(c)(3), starting respectively on December 31, 2003 and July 1, 2004, shall not apply to transactions directly involving the fueling of motor vehicles at a retail outlet or bulk purchaser-consumer facility, where the person selling, offering, or supplying the gasoline demonstrates as an affirmative defense that the exceedance of the standard was caused by gasoline delivered to the retail outlet or bulk purchaser-consumer facility prior to the date on which the delivery became subject to the prohibition pursuant to the phase-in provisions in section 2262.6(c)(5).

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

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

Section 2263. Sampling Procedures and Test Methods

(a) ~~Sampling Procedures.~~ 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.~~ 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

<i>Section</i>	<i>Gasoline Specification</i>	<i>Test Method</i> ^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 5580-00 ^e
2262	Olefin Content	ASTM D 1319-95a ^f (Through December 31, 2001) ^g ASTM D 6550-00 ^{g, h, i} (Starting January 1, 2002)
2262	Oxygen Content	ASTM D 4815-99
2262	T90 and T50	ASTM D 86-99a□1
2262	Aromatic Hydrocarbon Content	ASTM D 5580-00 ^j
2262.5(b)	Ethanol Content	ASTM D 4815-99
2262.6	MTBE Content	ASTM D 4815-99
<u>2262.6(c)</u>	<u>Oxygen from oxygenates identified in section 2262.6(c)(4)</u>	<u>ASTM D 4815-99</u>

- a Do not report values below the limit of detection (LOD) specified in the test method. Where a test method does not specify a LOD, do not report values below the lower limit of the scope of the test method.
- b Delete paragraph 4(b) concerning sampling.
- c Make the following modifications to paragraph 9.1:

Low Level Sulfur Calibration Procedure

15-Day Notice version, released 12/23/02

Supplemental comment deadline: 1/10/03

Hearing date: 12/12/02

Reagents

Thiophene, at least 99% purity
2-Methylthiophene, at least 98% purity
Toluene, reagent grade
2,2,4 - Trimethylpentane, reagent grade

Preparation of Stock Standard

Weigh standard materials thiophene (~0.7290 gm) and 2-methylthiophene (~0.7031 gm) separately into a tared volumetric flask and record the individual mass to 0.1 mg. Add “mixed solvent” containing 25% toluene and 75% iso-octane (by volume) into the flask to a net weight of approximately 50 gm and record the weight. This “Stock Standard” contains approximately 10 mg/gm sulfur. The actual sulfur concentration can be calculated as follows:

$$\text{Sulfur from thiophene (gm)} = \text{Weight of thiophene} * 32.06 * \text{purity} / 84.14$$

$$\text{Sulfur from 2-methylthiophene (gm)} = \text{Weight of 2-methylthiophene} * 32.06 * \text{purity} / 98.17$$

$$\text{Sulfur concentration of Stock Standard (gm/gm)} = (\text{sulfur from thiophene} + \text{sulfur from 2-methylthiophene}) / \text{net weight of the stock standard}$$

Multiply the sulfur concentration by 1000 to convert the unit to mg/gm.

Preparation of Calibration Standards

Pipet 2.5 ml of the Stock Standard to 250 ml flask and dilute with the “mixed solvent” to the mark. The “Diluted Standard” contains approximately 100 mg/kg sulfur. Prepare 5, 10, 20, 30, 50, 75 ppm calibration standards by pipetting 5, 10, 20, 30, 50, 75 ml of the Diluted Standard into a 100 ml flask, respectively, and diluting with the “mixed solvent” to the mark. The actual concentration of the calibration standard should be determined from the stock standard. The standards with concentration ranging from 5 to 100 ppm and the “mixed solvent” are to be used for calibrating the instrument.

- d Replace ASTM D 2622-94 reproducibility values with the following:

<i>Sulfur Content, ppm</i>	<i>Reproducibility</i>
10 to 30	40.5% X Sulfur Content (ppm)
>30	19.2% X Sulfur Content (ppm)

- e The reproducibility of benzene is as follows:

$$\text{Reproducibility} = 0.1409 (X^{1.133}), \text{ where } X = \text{vol } \%$$

- f Add the following reproducibility statement for oxygenate-containing samples:

	<i>Range</i>	<i>Reproducibility</i>
Olefins	0.3 – 33	0.819 (X) ^{0.6}

X = Volume %

- g Replace ASTM D6550-00 reproducibility equation with the following:

Reproducibility = 0.32 X^{0.5}
 where X is between 0.3 and 25 mass % olefin

- h The conversion from mass % olefin to volume % olefin is defined as follows:

volume % olefin = 0.857 * mass % olefin

- i Replace the last sentence in ASTM D6550-00 section 1.1 with the following:

The application range is from 0.3 to 25 mass % total olefins.

- j The reproducibility of total aromatic hydrocarbon is as follows:

Reproducibility = 1.4 volume %

- (c) ~~Equivalent Test Methods.~~ Equivalent Test Methods. Whenever this section provides for the use of a specified test method, another test method may be used following a determination by the executive officer that the other method produces results equivalent to the results with the specified method.

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).

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5. Amend section 2273(d)(1), title 13, California Code of Regulations, to read as follows:

Section 2273. Labeling of Equipment Dispensing Gasoline Containing MTBE.

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

- (1) Any person delivering gasoline to a retail gasoline outlet from December 16, 1999 through December 30, 2003 shall provide to the outlet operator or responsible employee, at the 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 4815-99, which is incorporated herein by reference, or any other test method determined by the executive officer to give equivalent results.

- (2) No person shall deliver gasoline containing 0.6 percent by volume or more MTBE to a storage tank at a retail gasoline outlet unless at the time of the delivery either:
 - (A) All pumps dispensing gasoline from the storage tank are labeled as containing MTBE, or
 - (B) The party delivering the gasoline, or on whose behalf the delivery is being made, can demonstrate that it has received and is maintaining a nonsuperseded written notification from the operator of the retail gasoline outlet that all of the outlet's gasoline dispensing equipment, or all of the outlet's dispensing equipment dispensing gasoline of the grade being delivered, is labeled as containing MTBE.

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).

6. Adopt section 2273.5, title 13, California Code of Regulations, to read as follows:

Section 2273.5. Documentation Provided with Delivery of Gasoline to Retail Outlets.

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 ethanol, and which may identify the volumetric amount of ethanol. If neither the outlet operator nor a responsible employee is at the outlet at the time of delivery, the documentation may be left at a reasonably secure location at the outlet.

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).