

STAFF'S SUGGESTED MODIFICATIONS TO THE CaRFG3 FOLLOW-UP AMENDMENTS

A. CHANGES PERTAINING TO THE DENATURED ETHANOL SPECIFICATIONS

1. *Standards for denatured ethanol.* The standards based on ASTM D 4806-98 would instead be based on ASTM D 4806-99, with the result that a standard for pHe would be added. (Section affected: section 2262.9(a)(1)(B).)

An exception from the standards for denatured ethanol would be added for where the seller or supplier has taken reasonably prudent precautions to assure that it will only be used in CARBOB which has been designed to be blended with ethanol subject to less stringent standards. (Section affected: section 2262.9(a)(2) (as revised).)

2. *Denaturant specifications.* The specifications for products represented as suitable for use as the denaturant in ethanol would be modified to allow proportionately higher amounts of aromatics, benzene and olefins if the seller takes necessary precautions to assure that it will be added at a specified maximum percentage that is less than 4.76% of the denatured ethanol. (Section affected: section 2262.9(a)(3) (as revised).)
3. *Documentation requirements.* The requirements for documentation in connection with the transfer of denatured ethanol would not apply until December 31, 2002. (Section affected: section 2262.9(c).)

B. CHANGES TO THE PROVISIONS ON CERTIFIED GASOLINE FORMULATIONS RESULTING IN EQUIVALENT EMISSION REDUCTIONS BASED ON MOTOR VEHICLE EMISSION TESTING

1. These provisions would be modified to so that there would be parallel mechanisms for evaluating whether a gasoline formulation achieves emission reductions equivalent to the CaRFG2 standards or equivalent to the CaRFG3 standards. (Section affected: section 2265 and incorporated document.)

C. CHANGES PERTAINING TO THE CARBOB REQUIREMENTS

1. *Characteristics of denatured ethanol used in determining whether a final blend of CARBOB complies with the standards for California gasoline.*
 - (a) Where a producer or importer identifies the specific properties of the denatured ethanol with which a specific batch of CARBOB is to be blended, the producer would be allowed to specify ethanol that is "dirtier" than the basic ethanol standards, as well as ethanol that is "cleaner. In addition, a producer or importer would be required to specify the properties of the ethanol for all batches of CARBOB supplied prior to December 31, 2002, because before that time

ethanol will not be subject to the ARB's new ethanol standards. (Section affected: section 2266.5(a)(2)(D)3. (as revised).)

- (b) Modifications would make clear that persons using the CARBOB Model would also be able to identify specific properties for the ethanol, in which case the transfer documents accompanying the CARBOB would have to identify the required maximum properties of the ethanol to be added downstream. (Section affected: section 2266.5(a)(2)(D) (as revised))
 - (c) An erroneous reference to the maximum olefin content of denatured ethanol has been corrected to identify a maximum of 0.5 volume percent instead of 0.05 volume percent. (Section affected: section 2266.5(a)(2)(D)1. (as revised).)
2. *DALs when using the CARBOB Model.* New language would be added on how DALs are to be determined for a refiner using averaging and the CARBOB model. The refiner would specify the DAL for the CARBOB, which would be used in determining whether the particular batch of CARBOB at the refinery meets the assigned DAL. There would also be a mechanism under which the CARBOB model is used to convert the CARBOB DAL to a DAL for the finished oxygenated gasoline; the latter DAL would be used for purposes of the offset requirements. (Section affected: section 2266.5(a)(5).)
 3. *Cap limits for downstream CARBOB.* The cap limits for T50 would be modified to specify separate limits for gasoline subject to the summertime RVP limits and gasoline not subject to the RVP limits. The summertime limits would be 228°F for all three ethanol ranges instead of 228°F for the mid-range and 226°F for the lowest and highest ranges. The limits for gasoline not subject to the RVP season would be 228°F for the low range, 232°F for the middle range, and 237°F for the high range, all based on an analysis of gasoline with a maximum RVP of 13.5 lbs. psi. (Section affected: section 2266.5(a)(6)(A).)
 4. *CARBOB downstream cap limits based on hand-blending.* A minor modification will conform the requirements to those for hand-blending and testing at the refinery – where the oxygen range is 1.8 wt.% to 2.2 wt.% or 2.5 wt.% to 2.9 wt.%, the amount of oxygen added in hand-blending is 2.0 wt.% or 2.7 wt.% respectively rather than 1.8 wt.% or 2.5 wt.%. (Section affected: section 2266.5(a)(6)(B).)
 5. *Notification identifying the specifications of the oxygenate to be added and used in determining compliance.* A requirement that the range for each regulated property would be changed to identifying the maximum amount only, to make sure that the downstream oxygenate blender is precluded from adding “cleaner” ethanol; a revision to the hand-blending provisions retains the concept that the properties of the oxygenate used in hand-blending fall within specified ranges. (Section affected: section 2266.5(b)(1)(D).)
 6. *Requirement that producers sample and test each batch of CARBOB for all regulated properties.* This requirement would be eliminated, because the ARB

Compliance Division believes that the requirement has only marginal utility. With the modification, the CARBOB testing requirements for producers would be the same as when the Predictive Model is used. Staff is not recommending elimination of the CARBOB testing requirements for importers because the transient nature of importer activities makes it more difficult for inspectors to monitor compliance. (Section affected: section 2266.5(c).)

7. *Limits on combining CARBOBs with different characteristics.* A provision would be added prohibiting combining CARBOBs designated for blending with ethanol subject to different property limits. (Section affected: section 2266.5(f)(1)(B).)
8. *CARBOB tank transitions.* Staff is proposing modifications to the condition that authorized tank transitions between CARBOBs specified for blending at different oxygen levels, or between CARBOB and finished gasoline, include bringing the tank down to 10% of capacity or less, and adding as much new product as possible. Under the modifications, the condition would be that the ratio of new product to old product must be 4 to 1 or higher. (Section affected: section 2266.5(f)(1)(C) .)
9. *Tank transitions CARBOB to California gasoline.* The provision allowing a change from CARBOB to California gasoline in a storage tank at a terminal or bulk plant under certain circumstances would be eliminated because further analysis showed that emissions increases would not necessarily be avoided. (Section affected: section 2266.5(f)(1)(D).)

D. SMALL REFINERS

1. *Previously shut-down small refineries.* Staff is proposing new provisions for a small refiner operating a small refinery that has been shut down since the start of the Phase 2 RFG requirements in March 1996. It is expected that CENCO Refining Co., owner of the former Powerine refinery in Santa Fe Springs, could qualify under these provisions.
 - (a) The refiner would have to meet the current “small refiner” definition in section 2260(a)(32), including a 55,000 barrel per stream day size limit on its refinery.
 - (b) During each of the first two years of the CaRFG3 program – December 31, 2002 through December 30, 2004 – the small refiner could produce up to a specified annual volume of California gasoline subject to the CaRFG2 flat or averaging standards in place of the CaRFG3 flat or averaging standards. The gasoline would be subject to the CaRFG3 cap limits and the prohibition on the use of MTBE. The refiner could designate individual batches of gasoline as subject to the CaRFG2 standards or the CaRFG3 standards.
 - (c) The maximum annual CaRFG2 volume for the two years would be calculated in the same manner as the current “qualifying small refiner” definition in section 2260(a)(29), except that the operating crude oil capacity figure would be

based on January 1995 rather than March 1999, and the gasoline to crude oil ratio would be based on January 1994 through June 1995, rather than January 1998 through March 1999. The resulting volume figure would be capped at 10,220,000 barrels per year (equivalent to 28,000 barrels per day).

(d) Excess emissions would be calculated using the specifications of the gasoline to be produced and comparing these to the CaRFG3 flat limits using the CaRFG3 Predictive Model. The excess emissions would have to be offset by emissions reductions from the refiner's diesel fuel, using the same basic approach as has been proposed in this rulemaking for the current "qualifying small refiner" provisions.

(e) The refiner would have to meet a compliance schedule that would enable it to fully meet the CaRFG3 standards for all of its California gasoline by December 31, 2004.

(Section affected: section 2282(e).)

2. *Capacity limit for small refiners under the diesel aromatics regulation.* The 50,000 barrel per stream day capacity limit for small refiners under the diesel aromatics regulation would be changed to 55,000 barrels per stream day to make it identical to the size limit under the CaRFG regulations (§ 2260(a)(32(A)).) (Section affected: section 2282(b)(19)(A) & (B).)

E. MISCELLANEOUS

1. *Multiple averaging banks.* The provision allowing up to six averaging banks at a refinery under specified conditions would be modified to allow up to six averaging banks. (Section affected: section 2264(c)(2).)
2. *Use of the evaporative model outside the RVP season.* Clarifying language would be added to the CaRFG3 Predictive Model Procedures limiting a producer or importer's ability to use the evaporative model for gasoline that will not be supplied during the RVP season. (Section affected: CaRFG3 Predictive Model Procedures.)
3. *Sampling procedures.* Minor modifications would eliminate language erroneously printed in Barclays Code of California Regulations, and conform a provision on tank taps to the current ASTM sampling procedure D 4057-95e1. (Section affected: section 2296(k)(2) and (k)(2)(A)1.)
4. *Repeatability of Grabner RVP test equipment.* Correct typographical errors in original proposal. (Section affected: section 2297(k)(1.1).)
5. Various nonsubstantive corrections and improvements.