

**NOTICE OF CONTINUATION OF PUBLIC HEARING TO CONSIDER AN AMENDMENT TO THE CALIFORNIA CLEANER BURNING GASOLINE REGULATIONS INCREASING THE CAP LIMIT FOR OXYGEN FROM 2.7 TO 3.5 PERCENT BY WEIGHT**

The Air Resources Board (ARB or Board), at the time and place noted below, will conduct a continuation of a public hearing to consider an amendment to the California cleaner burning gasoline regulations (formally referred to as "California Reformulated Gasoline Regulations" or CaRFG) that would increase the cap limit for oxygen from 2.7 to 3.5 percent by weight (wt.%). This amendment, along with several others, was described in the attached Notice for an August 27, 1998 rulemaking hearing. At the August 27, 1998 hearing, the Board adopted all of the other amendments, but continued consideration of the proposed increase in the cap limit for oxygen to the time and place noted below.

DATE: December 10, 1998

TIME: 8:30 a.m.

PLACE: Board Hearing Room, Lower Level  
2020 L Street  
Sacramento, California 95814

This item will be considered at a two-day meeting of the Board, which will commence at 8:30 a.m., December 10, 1998, and may continue at 8:30 a.m., December 11, 1998. This item may not be considered until December 11, 1998. Please consult the agenda for the meeting, which will be available at least 10 days before December 10, 1998, to determine the day on which this item will be considered.

This facility is accessible to persons with disabilities. If accommodation is needed, please contact ARB's Clerk of the Board at (916) 322-5594, or TDD (916) 324-9531, or (800) 700-8326 for TDD calls from outside the Sacramento area by November 25, 1998.

**BACKGROUND**

The CaRFG regulations, which became applicable in the spring of 1996, establish a comprehensive set of standards for gasoline designed to reduce emissions of air pollutants from motor vehicles. The standards cover sulfur, benzene, olefin, oxygen, and aromatic hydrocarbon contents, 50 percent (T50) and 90 percent (T90) distillation temperatures, and Reid vapor pressure (RVP).

The CaRFG standards include stringent limits for each regulated property that apply to gasoline when it is supplied from a production facility (typically a refinery) or an import facility. A refiner is allowed to designate a batch of gasoline as being subject to an alternative set of specifications if the alternative specifications have been shown using the "California Predictive Model" to result in equivalent reductions in exhaust emissions of hydrocarbons, oxides of nitrogen (NOx) and potency-weighted toxic air contaminants. All California gasoline — including batches of

gasoline sold using the Predictive Model — must meet the CaRFG “cap” limits for each regulated property, which apply throughout the gasoline distribution system.

The attached hearing notice describes several proposed amendments to the CaRFG regulations that the Board considered at an August 27, 1998 hearing. All of the proposed amendments except for increasing the cap limit for oxygen content were adopted by the Board at the August 27, 1998 hearing and have now gone into effect. The Board continued consideration of the proposed increase in the oxygen content cap limit to a December 10, 1998 hearing because of the effect of that amendment on a statutory exemption from the RVP standard for gasoline containing at least 10 volume percent (hereafter “10 percent”) ethanol.

The RVP of gasoline is a measure of its volatility. Gasoline with a higher RVP is more volatile than gasoline with a lower RVP, and thus has a greater propensity to evaporate. The CaRFG regulations limit the RVP of summertime gasoline to 7.0 pounds per square inch (psi) throughout the gasoline distribution system, in order to control evaporative emissions of hydrocarbons. Health and Safety Code section 43830(g), enacted in 1991, exempts gasoline blends containing 10 percent ethanol from the RVP standard. But the statute makes the exemption inapplicable if the ARB determines that such blends result in increased ozone forming potential, excluding consideration of NO<sub>x</sub>, compared to gasoline that complies with all of the CaRFG standards. It further provides that the ARB’s determination must be based on independently verifiable motor vehicle emission test data from a representative vehicle fleet.

Adding ethanol increases the RVP of the gasoline blend by about 1 psi, and thus increases evaporative emissions. Adding ethanol to gasoline also introduces oxygen. Until now, the oxygen cap limit of 2.7 wt.% in the CaRFG regulations has restricted the amount of ethanol blended into gasoline to about 7.7 percent by volume, thus precluding gasoline containing ethanol from qualifying for the exemption for 10 percent ethanol blends. However, the proposed amendment to the CaRFG regulations increasing the oxygen cap limit to 3.5 wt.% would permit the use of 10 percent ethanol in gasoline which, in turn, would allow refiners to market gasoline that exceeds the 7.0 psi RVP limit.

A separate Notice announces that, at the Board’s December 10-11, 1998 meeting, the Board will consider a staff proposal for the Board to make the HSC section 43830(g) determination that elevated RVP gasoline that contains 10 percent ethanol and is exempt from the RVP standard in the CaRFG regulations results in increased emissions and increased ozone forming potential, not considering NO<sub>x</sub>, compared to gasoline fully complying with the CaRFG standards. The staff’s recommended finding is based on the results of a recently completed ARB test program evaluating the emission impacts of elevated RVP gasoline containing 10 percent ethanol, as well as on a variety of other emission test programs and analyses.

The Board has continued the hearing on the amendment increasing the oxygen content cap in the CaRFG regulations to 3.5 wt.% to December 10, 1998, so that the proposed amendment and the proposed HSC section 43830(g) determination will be considered at the same two-day meeting of the Board.

## **THE CONTINUED HEARING**

The continued hearing will be conducted as described in the original notice for the August 27, 1998 hearing. Comments may be submitted as set forth in the original notice, except that written submissions must be addressed to and received by the Clerk of the Board, Air Resources Board, Post Office Box 2815, Sacramento, California 95812, no later than 12:00 noon, December 9, 1998, or received by the Clerk of the Board at the continued hearing. All comments submitted for the August 27, 1998 hearing will remain part of the rulemaking record.

The Staff Report and related materials for the rulemaking are available as described in the original notice. The materials are also available online at the ARB's Internet site; the Internet address is <http://www.arb.ca.gov/regact/regact.htm> and the material will be available under the heading for the cleaner-burning gasoline regulations. Inquiries should continue to be directed to Dean Simeroth, Chief of the Criteria Pollutants Branch in the Stationary Source Division, at (916) 322-6020.

CALIFORNIA AIR RESOURCES BOARD

Michael P. Kenny  
Executive Officer

Date: November 16, 1998