

TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER THE PROPOSED REGULATION ON THE COMMERCIALIZATION OF NEW ALTERNATIVE DIESEL FUELS

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider a proposed regulation governing the commercialization of motor vehicle Alternative Diesel Fuels (ADF). The ADF regulation is intended to provide a legal pathway for emerging diesel fuel substitutes to enter the commercial market in California, to manage and minimize environmental and public health impacts, and to preserve the emissions benefits derived from the ARB motor vehicle diesel regulations.

DATE: December 12, 2013

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Byron Sher Auditorium
1001 I Street
Sacramento, California 95814

This item may be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., December 12, 2013, and may continue at 8:30 a.m., on December 13, 2013. This item may not be considered until December 13, 2013. Please consult the agenda for the hearing, which will be available at least 10 days before December 12, 2013, to determine the day on which this item will be considered.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW PURSUANT TO GOVERNMENT CODE 11346.5(a)(3)

Sections Affected: Proposed adoption of California Code of Regulations (CCR), title 13, new sections 2293, 2293.1, 2293.2, 2293.3, 2293.4, 2293.5, 2293.6, 2293.7, 2293.8, 2293.9, and Appendix A.

Existing sections 2290, 2291, 2292.1, 2292.2, 2292.3, 2292.4, 2292.5, 2292.6, and 2292.7 would be grouped under new subarticle 1 (Specifications for Current Alternative Motor Vehicle Fuels). Existing sections 2293 and 2293.5 would be renumbered to 2294 and 2295, and would be grouped under a new subarticle 3 (Ancillary Provisions).

Documents Incorporated by Reference: The following documents, test methods, and model would be incorporated in the regulation by reference as specified by section:

1. "Guidance Document and Recommendations on the Types of Scientific Information Submitted by Applicants for California Fuels Environmental Multimedia Evaluations (Revised June 2008)," University of California, Davis, University of California, Berkeley, and Lawrence Livermore National Laboratory, available at <http://www.arb.ca.gov/fuels/multimedia/080608guidance.pdf> section 2293.2(a)(20);
2. ASTM D613-10ae1, "Standard Test Method for Cetane Number of Diesel Fuel Oil (2010)," section 2293.7;
3. ASTM D5186-03(2009), "Standard Test Method for Determination of Aromatic Content and Polynuclear Aromatic Content of Diesel Fuels and Aviation Turbine Fuels by Supercritical Fluid Chromatography (2009)," section 2293.6;
4. ASTM D287-12b, "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method) (2012)," Appendix 1(a)(2), (a)(3)(C), (a)(3)(D), (a)(3)(E);
5. ASTM D4629-12, "Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection (2012)," Appendix 1(a)(3)(C), (a)(3)(D), (a)(3)(E);
6. ASTM D5453-93, "Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence (1993)," section 2293.7(a)(1), Appendix 1(a)(3)(C), (a)(3)(D), (a)(3)(E);
7. ASTM D6890-13a, "Standard Test Method for Determination of Ignition Delay and Derived Cetane Number (DCN) of Diesel Fuel Oils by Combustion in a Constant Volume Chamber (2013)," section 2293.6(a), Appendix 1(a)(2);
8. ASTM D445-12, "Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity) (2012)," Appendix 1(a)(3)(C), (a)(3)(D), (a)(3)(E);
9. ASTM D93-13, "Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester (2013)," Appendix 1(a)(3)(C), (a)(3)(D), (a)(3)(E);
10. ASTM D86-12, "Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure (2012)," Appendix 1(a)(3)(C), (a)(3)(D), (a)(3)(E);
11. EN 14103:2011, "Fat and oil derivatives. Fatty acid methyl esters (FAME). Determination of ester and linolenic acid methyl ester contents (2011)," Appendix 1(a)(3)(C), (a)(3)(D);
12. Snedecor and Cochran, "Statistical Methods," (7th ed., 1980), p.91, Iowa State University Press, Appendix 1(a)(3)(G);

Background and Effect of the Proposed Rulemaking:

The Low Carbon Fuel Standard (LCFS) (title 17, California Code of Regulations (CCR) section 95480 et seq.) and the federal Renewable Fuels Standard (RFS) (section 211 of the Clean Air Act, 42 United States Code 7545) both incentivize the expansion of the California transportation fuel pool to include more renewable and low carbon replacements for conventional motor vehicle gasoline and diesel. Furthermore, title 13, California Code of Regulations sections 2281 through 2285, impose fuel quality standards on conventional motor vehicle diesel fuel to limit both sulfur and aromatic hydrocarbon content.

There are already alternative diesel fuel substitutes in the California market, such as biodiesel and renewable diesel, and the LCFS, RFS, and other policies and programs will encourage further innovations in fuels. Some of these innovative fuels are already sold commercially and controlled through industry consensus standards that are implemented by the California Department of Food and Agriculture. Such fuels-related industry consensus standards seek mainly to address vehicle performance and fuel production quality issues. By contrast, air quality impacts from alternative diesel fuels are generally addressed by ARB or the U.S. Environmental Protection Agency (EPA).

The current California diesel fuel regulations focus almost entirely on petroleum hydrocarbon-based fuels for compression ignition engines. Because of the focus on petroleum fuels, the existing diesel regulations are ill-suited to providing a market pathway for innovative non-hydrocarbon-based alternative diesel fuels (e.g., biodiesel, dimethyl ether) and for ensuring that the anticipated air quality benefits from ARB's existing specifications for California diesel ("CARB diesel") are preserved.

Therefore, staff is proposing to consolidate existing administrative and legal procedures and requirements for alternative diesel fuels into this new regulation. The regulation will establish clear legal requirements for the introduction and commercial use of both current ADFs not already subject to ARB fuel standards and also new ADFs developed in the future. Staff proposes to specify biodiesel as the first commercial alternative diesel fuel subject to this new regulation, which will include necessary provisions to ensure fuel quality, safeguard against potential increases in oxides of nitrogen (NOx) emissions, and maintain enforceability of these requirements.

Objectives and Benefits of the Proposed Regulation:

The primary objective of the proposed ADF regulation is to create a streamlined legal framework that protects California's residents and environment while allowing innovative ADFs to enter the commercial market as efficiently as possible. The proposal is intended to ensure that the introduction and use of innovative ADFs in California will have no significant adverse impacts on public health or the environment relative to conventional, petroleum-based "CARB diesel."

The proposed ADF regulation establishes a comprehensive, multi-stage process governing the commercialization of new ADFs in California. This process would start with a screening analysis that would allow limited sales of a regulated diesel substitute while it undergoes an initial evaluation; an intermediate stage with expanded sales governed by enhanced monitoring, testing, and a multimedia evaluation; and a final stage with full-scale commercial sales and provisions designed to maintain environmental and public health protections as needed. The main benefit to the State is to provide and maintain safeguards that protect public health and the environment while such new fuels are being tested and used. The proposed regulation also benefits the State by providing a framework and clear rules that, in turn, will encourage the more rapid introduction of new innovative fuels with demonstrated public health advantages. Many of the innovative fuels under development have lower emissions of greenhouse gases (GHG), criteria, and toxic air pollutants, and a number of such fuels can also be produced from renewable or waste sources.

The proposal represents the culmination of a major ARB effort to develop a clear pathway for the commercialization of new diesel fuel substitutes. Over the past several years, ARB staff has conducted and continues to conduct essential research and analyses to understand the air quality impacts of biodiesel, renewable diesel, and other diesel fuel substitutes and additives (e.g., dimethyl ether, diesel additives). ARB also sponsored a comprehensive multimedia assessment under Health and Safety Code section 43830.8 for biodiesel and renewable diesel to determine if these fuels have any significant adverse impacts relative to conventional CARB diesel.

The effort started with the need to characterize and quantify the emissions potential of biodiesel and renewable diesel, the ultimate goal being the establishment of air quality-based fuel specifications for these two diesel substitutes that would allow for full commercialization in California. However, since that effort began, the LCFS, RFS, and other fuels policies and programs came into effect. Those programs encourage fuel producers to innovate, not only with biodiesel and renewable diesel, but also with other lower carbon fuels such as dimethyl ether. Indeed, such fuels are already under development. Consequently, ARB staff determined that a uniform and comprehensive review and approval program is needed to set clear ground rules for introducing and commercializing diesel fuel substitutes, both current ones like biodiesel and renewable diesel and upcoming ones such as dimethyl ether and others, while preserving the benefits of CARB diesel.

ARB staff has worked with major stakeholders such as biodiesel and renewable diesel producers; petroleum refiners and marketers; engine manufacturers; and environmental and public health advocates and local air districts to solicit input via meetings and public workshops on this proposal. Staff developed the proposal based on ARB testing and research, and feedback from stakeholders.

DETERMINATION OF INCONSISTENCY AND INCOMPATIBILITY WITH EXISTING STATE REGULATIONS

During the process of developing the proposed regulatory action, ARB staff reviewed other programs related to ADFs and concluded that the proposal is consistent and compatible with existing state regulations. In particular, staff reviewed two existing California programs: the ARB's Low Carbon Fuel Standard and the California Department of Food and Agriculture's (CDFA) fuels program.

The Low Carbon Fuel Standard regulation (17 CCR 95480 et seq.) reduces the average carbon intensity (CI) of California transportation fuels. However, the LCFS neither sets fuel specifications or any other requirements on the properties of the regulated fuels, nor does it establish provisions that govern the use and commercialization of transportation fuels. Thus, the proposal would be consistent and compatible with the LCFS.

Staff also reviewed CDFA's fuels program. The staff's proposal is consistent and compatible with the CDFA's fuels program because the fuel specifications in the proposal are air quality-based. Air quality-based specifications are allowed under State law, and the specifications in the proposal for ADFs that are currently regulated by CDFA (i.e., currently biodiesel and renewable diesel) fall within those contained in CDFA's regulations. Further, the proposal similarly is consistent and compatible with CDFA's developmental fuels variance program. This is because CDFA's program is intended to generate engine performance and warranty data to inform development of a consensus standard, while the proposal's screening analysis and multimedia evaluation provisions are intended to characterize environmental and public health impacts.

COMPARABLE FEDERAL REGULATIONS

There are no federal regulations that are comparable to the proposed regulation or would accomplish the same objectives and benefits. The U.S. EPA implements a registration program for fuels and fuel additives under title 40, Code of Federal Regulations, part 79. Under that program, proponents of new fuels and fuel additives need to provide to U.S. EPA requested information so that the agency can determine the fuel or additive's "product emissions that may pose an unreasonable risk to public health." In addition, the U.S. EPA implements the Renewable Fuels Standard program (RFS2), which mandates fixed volumes of specified biofuels to be blended with the national gasoline and diesel fuel pools. Under this program, mandated annual volumes of biomass-based diesel are specified, including biodiesel and renewable diesel.

There are a number of significant differences between the federal programs and the staff's proposal. First, the federal registration program applies only to gasoline and diesel and their additives. By contrast, the staff's proposal applies to any new alternative diesel fuel, including fuels that bear little or no resemblance to conventional diesel but nevertheless are designed to be used in compression ignition engines. Another significant difference is that the federal program applies only to on-road fuels and additives, while the staff's proposal applies to alternative diesel fuels used in on-

road and off-road motor vehicles. For these reasons the federal program under 40 CFR 79 is neither comparable to the proposal nor would it accomplish the same objectives and benefits. Similarly, the proposal presents no conflict or inconsistency with the RFS2 program since the proposal does not restrict the volume sales of biodiesel, other biomass-based ADFs, or any other biofuels subject to RFS2. Instead, the proposal would impose specified pollutant mitigation measures (which does not include sales volume limits) if and when certain specified criteria are met, and staff's analysis projects it is highly unlikely those criteria will be met in the foreseeable future. Further, the proposal is based on California's general police power authority and is consistent with the provisions governing the State's regulation of fuels and fuel additives under section 211 of the Clean Air Act.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

ARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The ISOR is entitled, "Staff Report: Initial Statement of Reasons for the Proposed Regulation on the Commercialization of New Alternative Diesel Fuels."

Copies of the ISOR and the full text of the proposed regulatory language may be accessed on ARB's website listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990, on October 23, 2013.

Final Statement of Reasons Availability

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on ARB's website listed below.

Agency Contact Persons

Inquiries concerning the substance of the proposed action may be directed to the designated agency contact persons, Jim Aguila, Manager of the Substance Evaluation Section, at (916) 322-8283, or Alexander Mitchell, Air Pollution Specialist, at (916) 327-1513.

Further, the agency representative to whom nonsubstantive inquiries concerning the proposed administrative action may be directed is Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board staff has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

Internet Access

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on ARB's website for this rulemaking at <http://www.arb.ca.gov/regact/2013/adf2013/adf2013.htm>.

DISCLOSURES REGARDING THE PROPOSED REGULATION

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulatory action are presented below.

Fiscal Impact / Local Mandate

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action would not create costs or savings to any State agency or in federal funding to the State, costs or mandate to any local agency or school district, whether or not reimbursable by the State pursuant to Government Code, title 2, division 4, part 7 (commencing with section 17500), or other nondiscretionary cost or savings to State or local agencies.

Significant Statewide Adverse Economic Impact Directly Affecting Business, Including Ability to Compete

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

Cost Impacts on Representative Private Persons or Businesses

In developing this regulatory proposal, the Executive Officer evaluated the potential economic impacts on representative private persons or businesses. As explained in the ISOR, the ARB is not aware of any significant cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Results of the Economic Impact Analysis/Assessment Prepared Pursuant to Government Code Sec. 11346.3(b)

Effect on Jobs/Businesses:

The Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A

detailed assessment of the economic impacts of the proposed regulatory action can be found in the Economic Impact Analysis in the ISOR.

Benefits of the Proposed Regulation:

The economic benefits of the proposed ADF regulation include the certainty provided by establishing clear rules and procedures for commercializing new alternative diesel fuels in California, which in turn reduces the cost and time required to bring new ADFs to market. At the same time, the proposal preserves the emission benefits of existing conventional "CARB diesel" fuel. Further, the proposed regulation benefits the State by encouraging a more rapid deployment of ADFs that could demonstrate significant public health advantages, such as lower criteria and toxic emissions, lower greenhouse gas emissions, and preservation of ecological resources, since many ADFs are produced from renewable or waste product sources.

The proposed regulation requires mitigation prior to biodiesel sales reaching a threshold that would cause an overall NOx emissions increase. Such mitigation would result in additional costs. However, staff's analysis indicates it is highly unlikely that the threshold would be reached and therefore no mitigation costs are assumed.

The proposed ADF regulation does not require any specific amount of biodiesel or renewable diesel production volume. Instead, it will establish fuel standards and a legal framework for biodiesel and other ADFs to enter the commercial market. Producers of biodiesel can already meet the proposed standards, and biodiesel itself will enter into the proposed ADF program at the monitored commercialization stage called Stage 3A. Because producers of biodiesel will be in the same position in the market as they were before promulgation of the proposed regulation, no jobs will be created or lost due to the staff's proposal. Some increased testing and recordkeeping will be required under the proposal; however, no jobs will be created or lost since current businesses can accommodate the increased testing and recordkeeping with existing resources.

A summary of these benefits is provided. Please refer to "Objectives and Benefits," under the Informative Digest of Proposed Action and Policy Statement Overview Pursuant to Government Code 11346.5(a)(3) discussion earlier in this notice.

Effect on Small Business

The Executive Officer has also determined, pursuant to California Code of Regulations, title 1, section 4, that the proposed regulatory action would not have any significant impacts on small businesses because any costs of compliance are minimal and will not affect the retail price of ADFs offered to the public.

Housing Costs

The Executive Officer has also made the initial determination that the proposed regulatory action will not have a significant effect on housing costs.

Business Reports

In accordance with Government Code section 11346.3(d) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements of the proposed regulatory action which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Alternatives

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board, or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law. The analysis of such alternatives can be found in Chapter 7 of the ISOR.

Environmental Analysis

In accordance with ARB's certified regulatory program, California Code of Regulations, title 17, sections 60006 through 60007, and the California Environmental Quality Act, Public Resources Code section 21080.5, ARB staff has conducted an analysis of the potential for significant adverse and beneficial environmental impacts associated with the proposed regulatory action. The environmental analysis of the proposed regulatory action can be found in Chapter 7 of the ISOR.

WRITTEN COMMENT PERIOD AND SUBMITTAL OF COMMENTS

Interested members of the public may present comments orally or in writing at the meeting and may provide comments by postal mail or by electronic submittal before the meeting. The public comment period for this regulatory action will begin on October 28, 2013. To be considered by the Board, written comments not physically submitted at the meeting, must be submitted on or after October 28, 2013 and received **no later than 12:00 noon on December 11, 2013**, and must be addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

You can sign up online in advance to speak at the Board meeting when you submit an electronic board item comment. For more information go to:
<http://www.arb.ca.gov/board/online-signup.htm>.

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

ARB requests that written and email statements on this item be filed at least 10 days prior to the hearing so that ARB staff and Board members have additional time to consider each comment. The Board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

Additionally, the Board requests but does not require that persons who submit written comments to the Board reference the title of the proposal in their comments to facilitate review.

AUTHORITY AND REFERENCE

This regulatory action is proposed under the authority granted in Health and Safety Code, sections 38510, 38560, 38560.5, 38571, 38580, 39600, 39601, 41510, 41511, 43013, and 43018; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District*, 14 Cal. 3rd 411, 121 Cal.Rptr. 249 (1975). This action is proposed to implement, interpret, and make specific sections 38501, 38510, 38560, 38560.5, 38571, 38580, 39000, 39001, 39002, 39003, 39515, 39516, 41510, 41511, 43013, and 43018, Health and Safety Code; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District*, 14 Cal. 3rd 411, 121 Cal.Rptr. 249 (1975).

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Government Code, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340).

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice and that the regulatory language as modified could result from the proposed regulatory action; in such event, the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990.

SPECIAL ACCOMMODATION REQUEST

Consistent with California Government Code Section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

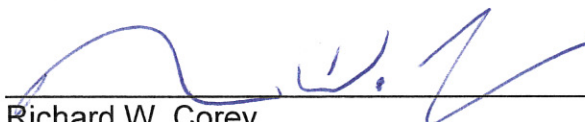
To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades linguisticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia
- Documentos disponibles en un formato alterno u otro idioma
- Una acomodación razonable relacionados con una incapacidad

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

CALIFORNIA AIR RESOURCES BOARD



Richard W. Corey
Executive Officer

Date: October 15, 2013

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.arb.ca.gov.