TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE VERIFICATION PROCEDURE, WARRANTY AND IN-USE COMPLIANCE REQUIREMENTS FOR IN-USE STRATEGIES TO CONTROL EMISSIONS FROM DIESEL ENGINES

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider adopting amendments to the Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines.

DATE: August 23, 2012

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., August 23, 2012, and may continue at 8:30 a.m., on August 24, 2012. This item may not be considered until August 24, 2012. Please consult the agenda for the meeting, which will be available at least 10 days before August 23, 2012, to determine the day on which this item will be considered.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed amendments to California Code of Regulations (CCR), title 13, sections 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710 and 2711.

Background:

In 1998, ARB identified diesel particulate matter (PM) as a toxic air contaminant (title 17, CCR, section 93000). A toxic air contaminant is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. Diesel PM is of particular concern because it is distributed over large regions, thus resulting in widespread public exposure.

To address this large-scale health concern, in 2000, ARB adopted the Diesel Risk Reduction Plan (Diesel RRP) with the goal of reducing PM emissions and their associated health risks by 85 percent by the year 2020. The Diesel RRP identified a number of key measures to achieve this goal: more stringent standards for all new diesel-fueled engines and vehicles, retrofitting in-use diesel engines with diesel emission control strategies, and the use of low-sulfur diesel fuel.

To support the Diesel RRP, staff developed a verification procedure (Procedure) for in-use diesel emission control strategies (strategies or DECS) that was adopted by the Board in May 2002. The Procedure is used by staff to evaluate in-use DECS to ensure they achieve real and durable PM emissions reductions. It specifies emissions and durability test procedures, establishes warranty requirements, and in-use compliance testing requirements. Strategies that meet all of the Procedure's requirements are verified and thus become candidate compliance options to meet ARB fleet regulations that require the control of diesel emissions from in-use fleets.

In-use fleet regulations rely on having verified diesel emission control strategies available to fleet owners as a compliance option. Diesel vehicles and equipment for which regulations have already been adopted include transit buses (title 13, CCR, section 2023, et seq.), solid waste collection vehicles (title 13, CCR, section 2021, et seq.), vehicles that belong to public agencies and utilities (title 13, CCR, section 2022, et seq.), mobile cargo handling equipment at ports and intermodal rail yards (title 13, CCR, section 2479), transport refrigeration units (title 13, CCR, section 2477), off-road diesel equipment (title 13 CCR, section 2449 et seq.), and private on-road diesel vehicles (title 13, CCR, section 2025 et seq.). These regulations provide several paths to compliance, one of which is the installation of verified diesel emission control strategies on existing engines.

Although applying for verification is voluntary, several DECS manufacturers have experienced reduced sales of DECS due to the global recession and recent changes to ARB's fleet regulations that extended deadlines to install DECS. In response, ARB staff reviewed the Procedure and proposes amendments to reduce certain of the Procedure's testing requirements. Staff believes that a number of amendments to the Procedure could be made while still ensuring that it serves the needs of the in-use fleet regulations and device end-users.

Objectives and Benefits of the Proposed Amendments:

To address concerns voiced by verification applicants regarding the testing costs associated with the Procedure's in-use compliance requirements, staff is proposing amendments that would reduce the amount of in-use testing that the Procedure currently requires. Specifically, staff proposes to replace one phase of in-use emissions testing with field testing, increase the sales thresholds that determine when testing must begin, provide for functionality testing of supporting components, provide a pathway to complete the required in-use testing using only one phase of emissions tests, and

streamline the in-use compliance process. These proposed changes would reduce the cost to verification applicants while preserving the Procedure's goals and objectives.

In support of these proposed amendments, staff has also proposed amendments to add new language to section 2709 (In-Use Compliance Requirements) specifying the conditions for passing in-use compliance testing. The proposed changes are necessary to accommodate the introduction of field testing and the inclusion of visual and functional tests, and to ensure that the current deterioration factors are appropriate for all covered pollutants. Under these proposed amendments, verification applicants would propose appropriate test criteria for Executive Officer approval based on the design and operational characteristics of their particular devices.

Staff's proposed amendments would also add recall provisions and modify and clarify the annual warranty reporting requirements for applicants and installers. Staff's proposal would provide the Executive Officer with recall authority based on criteria such as a failure to meet the requirements for passing in-use compliance testing, failure of an operational feature, warrantable failures of the same part or component in excess of 4 percent of the number of engines using the strategy, or for emission safety considerations. Staff's proposal also clarifies how the existing 4 percent threshold for warrantable failures is determined and clarifies the existing installation warranty requirements and requires installers of verified strategies to begin submitting annual installation warranty reports similar to the product warranty reports currently submitted by applicants. These changes would ensure the end-users of verified devices remain protected and will result in better installation and maintenance practices. Staff is continuing to investigate additional changes to the Procedure to assist verification applicants in investigating and resolving warranty claims.

Staff is also proposing several amendments that are generally intended to provide more specificity and clarity to the existing requirements. These include conditions under which an application may be terminated; engine maintenance criteria that must be provided by the applicant to their authorized installers for verified device pre-installation compatibility assessment; minimum operational data monitoring and storage requirements for backpressure monitoring systems; emission control groups and test engine selection criteria; labeling durability and replacement; alternative diesel fuels and fuel additives requirements; verified retrofit tampering prohibition; and safety evaluation requirements.

Staff also proposes to correct several format and numbering errors in section 2702, add several definitions to section 2701, identify the appropriate contact and mailing addresses for application submittals, clarify the durability demonstration period for locomotive verifications, add clarifying language to identify what may be considered a design modification regarding an applicant's DECS, and clarify the methodology used to determine emissions reductions. These changes would not affect the stringency of the verification process but would simply modify the existing evaluation protocol and implement the original intent of the regulation.

Lastly, staff also, at the request of the regulated entities, proposes to extend the conditional verification timeframe for off-road strategies from one to two years. This would benefit verification applicants by allowing them additional time to complete their conditional verification requirements.

Overall, staff's proposed amendments would provide additional flexibility and economic relief to applicants while ensuring that DECS verified by ARB continue to be durable and effective in reducing emissions from existing diesel vehicles. The proposed amendments would also strengthen and preserve critical end-user protections to ensure the safe and effective use of DECS to meet ARB's various fleet rules.

CONSISTENCY AND COMPATABILITY WITH EXISTING STATE REGULATIONS

The proposed amendments are consistent with existing State regulations and simply modify an existing protocol used to evaluate diesel emission control strategies.

COMPARABLE FEDERAL REGULATIONS

United States Environmental Protection Agency (U.S. EPA) has published a draft document, "General Verification Protocol for Diesel Exhaust Catalysts, Particulate Filters, and Engine Modification Control Technologies for Highway and Nonroad Use Diesel Engines," but has not promulgated formal regulations for this verification protocol. That verification protocol is intended to support the voluntary retrofit programs initiated by U.S. EPA, while staff's proposal is to support ARB's Diesel RRP and all the associated in-use fleet regulations. Additionally, the U.S. EPA program affords no warranty protection.

AVAILABILITY OF DOCUMENTS

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 report is entitled: *Proposed Amendments to the Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines.*

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikeout format to allow for comparison with the existing regulations, 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 July 5, 2012.

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 the ARB website, listed below.

AGENCY CONTACT PERSONS

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons, Mr. Keith A. Macias, Manager, (626) 575-6600, or Mr. Dean Bloudoff, Air Resources Engineer, (916) 322-8987.

Further, non-substantive inquiries concerning the proposed administrative action may be directed to Ms. Trini Balcazar, Regulations Coordinator, (916) 445-9564. The Board 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 Initial Statement of Reasons (ISOR), and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB website for this rulemaking at http://www.arb.ca.gov/regact/2012/verdev2012/verdev2012.htm

FISCAL IMPACT

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 amendments are presented below.

ECONOMIC IMPACT ASSESSMENT/ANALYSIS

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, except ARB. ARB will require one additional staff person to monitor and investigate warranty issues in calendar years 2013 and thereafter. Total annual staff costs are estimated to be $187,000.

COST IMPACTS ON REPRESENTATIVE PRIVATE PERSONS OR BUSINESSES

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. The proposed amendments to the Procedure would lower costs to the DECS industry by reducing the amount of

required in-use compliance testing and allowing additional unit sales before this testing is required. The addition of in-field tests, functional component testing, and streamlining the in-use compliance process will further reduce the costs associated with the in-use compliance requirements.

The lower cost could be offset by the costs of a potential recall event however. The Procedure currently includes less direct provisions that provide for remedial measures in the event of a failure associated with an applicant's DECS, so even without the addition of the proposed recall provisions it is assumed that applicants have made appropriate financial preparations and that such costs are already being incurred. Should a recall event occur, DECS installers and other maintenance providers will likely see an increased demand for system replacement or repairs, while applicants may see their savings eliminated. However, applicants that produce a robust system are unlikely to be subject to a recall event and will realize a long-term financial benefit from the reduction in the amount of in-use testing.

The proposed amendment requiring the submission of an annual installation warranty report is estimated to individually cost each installer approximately $960 each year, and the total estimated annual statewide reporting cost is $73,000 based on the number of businesses that are currently installing ARB verified devices. However, these costs will likely be offset by reduced installer costs associated with better and earlier identification of any in-field issues before they escalate into significant repairs, maintenance issues, and penalties. The remaining amendments represent procedural changes and clarifications and should not result in any significant impacts on businesses.

Overall, the proposed amendments are estimated to provide a savings to industry of approximately $2.1 million to $5.6 million and reduce future verification costs by approximately 10 percent. Because no direct emissions benefits are associated with staff's proposal, no cost effectiveness analysis could be performed.

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, or on representative private persons.

STATEMENT OF THE RESULTS OF THE ECONOMIC IMPACT ASSESSMENT PREPARED PURSUANT TO GOVERNMENT CODE SEC. 11346.3(b)

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.

BENEFITS OF THE PROPOSED REGULATION

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

EFFECT ON SMALL BUSINESS

The Executive Officer has also determined, pursuant to CCR, title 1, section 4, that the proposed regulatory action would potentially affect small businesses, especially installers of verified devices. Installers who choose to install these verified devices would incur costs due to increased reporting requirements.

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements of the regulation 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.

ENVIRONMENTAL ANALYSIS

In accordance with the ARB's certified regulatory program, CCR, title 17, sections 60006 through 60007, and the California Environmental Quality Act, Public Resources Code section 21080.5, ARB 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 IV of the ISOR.

SUBMITTAL OF COMMENTS AND WRITTEN COMMENT PERIOD

Interested members of the public may also present comments orally or in writing at the meeting, and comments may be submitted by postal mail or by electronic submittal before the meeting. The public comment period for this regulatory action will begin on Monday, July 9, 2012. To be considered by the Board, written comments, not physically submitted at the meeting, must be submitted on or after Monday, July 9, 2012 and received **no later than 12:00 noon on Wednesday, August 22, 2012**, 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.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under that authority granted in Health and Safety Code, sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018, 43105, 43600, and 43700. This action is proposed to implement, interpret and make specific sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, and 43204-43205.5 of the Health and Safety Code and title 17, CCR, section 93000.

PURPOSE, BENEFITS, AND GOALS

The Procedure is used to verify the emissions reduction capabilities of candidate DECS and ensures that they remain durable throughout their warrantable life. Regulated fleets may elect to retrofit their existing engines and if so, are required to use a DECS verified by ARB under the Procedure. Due to declining DECS sales, applicants for verification have expressed market concerns and proposed several alternatives to the current in-use compliance testing requirements with the intent of reducing the costs of the required testing. Staff evaluated these proposals and used them as the basis for the proposed amendments.

The proposed amendments would reduce costs to the applicants and streamline the

in-use compliance requirements. The proposed amendments would also better define the application and review process, clarify the high backpressure notification requirements, clarify the attributes that define an emission control group, provide additional guidance regarding the selection of test engines, add a more defined pre-installation assessment to better ascertain an engine's suitability prior to retrofit, ensure installers are properly trained, clarify safety testing requirements, clarify the warranty reporting requirements, clarify the testing and labeling requirements for fuel-based strategies, provide allowances for restricted use emergency standby engines, and provide applicants additional time to complete an off-road conditional verification.

The proposed amendments provide short-term financial savings to all applicants by reducing the amount of required in-use compliance testing by up to one-half and allowing additional sales before this testing is required. The addition of functional in-field tests and the alternative test schedule further reduces the costs associated with the in-use compliance requirements. Streamlining the in-use compliance process and providing additional time for applicants to complete their conditional verifications provides even greater financial flexibility. The addition of recall provisions and clarifications to the warranty reporting requirements are necessary to maintain the stringency of the Procedure and to protect end-users. The proposed amendments provide the economic flexibility requested by applicants while maintaining the effectiveness of the Procedure and ensuring that end-users of these devices remain protected.

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 approve 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 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 the 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

Special accommodation or language needs can be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents available in an alternate format or another language; or
- 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.

Comodidad especial o necesidad de otro idioma puede ser proveido para alguna de las 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 officina del Consejo al (916) 322-5594 o envie un fax a (916) 322-3928 lo mas pronto possible, pero no menos de 10 dias de trabajo antes del dia programado para la audencia 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

James N. Goldstene
Executive Officer

Date: 6/26/12

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