## STATEMENT OF THE MANUFACTURERS OF EMISSION CONTROLS ASSOCIATION ON THE AIR RESOURCES BOARD'S PROPOSED AMENDMENTS TO THE VERIFICATION PROCEDURE, WARRANTY AND IN-USE COMPLIANCE REQUIREMENTS FOR IN-USE STRATEGIES TO CONTROL EMISSIONS FROM DIESEL ENGINES.

## **January 28, 2010**

The Manufacturers of Emission Controls Association (MECA) is pleased to provide testimony in support of ARB's proposed amendments to the verification procedure, warranty and in-use compliance requirements for existing on-road, off-road and stationary diesel-fueled vehicles and equipment. We believe that the proposed amendments and clarifications to the regulation present a balanced, fair, and flexible approach to ensure that verified diesel emission control technologies deliver the performance and durability necessary to achieve the goals of all regulations that make up ARB's Diesel Risk Reduction Plan.

MECA is a non-profit association of the world's leading manufacturers of emission control technology for motor vehicles. Our members have over 35 years of experience and a proven track record in developing and manufacturing emission control technologies for a wide variety of on and off-road vehicles and equipment running on gasoline, diesel and alternative fuels. Many of our members have verified or are in the process of verifying diesel retrofit emission control technologies including diesel particulate filters, diesel oxidation catalysts, crankcase filter systems, and combined NOx/DPF reduction technologies for on-road, off-road and stationary applications to help ARB meet the emission reduction objectives under current and future in-use regulations.

MECA and our members have been actively engaged throughout the development of the original verification regulation adopted by the Board in May of 2002 and subsequently in providing feedback in workshops and meetings with ARB staff to continually improve the verification, warranty and in-use compliance requirements and make ARB's verification process a model for other retrofit programs in the U.S. and around the world. ARB's Diesel Risk Reduction Plan has served to develop a market for our members and others in the manufacture and commercial application of diesel retrofit emission control technology. The end result of these efforts has been a growing number of technology options for a wide variety of retrofit applications.

With the latest set of amendments to the verification procedure, ARB staff has made substantial clarifications and improvements. MECA provides the following comments, on behalf of the emission control industry, in the spirit of further clarifying and improving the verification process. We believe that the suggestions can substantially improve the proposed amendments while ensuring that the verified technologies will provide real emissions reductions from existing engines.



Manufacturers support the changes to the maintenance requirements (2706 (h)) for VDECS to insure their durable performance over their full useful life. In subsection (2), the proposal requires that applicants provide detailed maintenance information sufficient to allow owners to maintain the VDECS without requiring the services of the applicant or their distributor. MECA has shared our concerns with ARB regarding the cleaning of diesel particulate filter elements by unqualified personnel given the complexity and diversity of the technologies involved. MECA members believe in a free market and under normal operating conditions, involving regular engine maintenance, routine cleaning may be performed by third party cleaning service providers. There are instances where the engine or VDECS may have not been maintained properly that may require the diagnosis and troubleshooting that can only be provided by a qualified, trained technician familiar with a specific VDECS providers technology. Because an applicant cannot anticipate all the possible cleaning scenarios that a VDECS may require based on its past exposure history, we recommend that section 2706 (h) 2 be amended as follows:

- (2) The applicant must provide detailed maintenance information for a verified diesel emission control strategy to the owner upon delivery of the diesel emission control strategy. The information provided must be sufficient to enable an owner to provide routine maintenance of the diesel emission control strategy without requiring normal services be provided exclusively by the applicant or the applicant's distributor. The required information includes, but is not limited to:
- (A) Specific normal maintenance and cleaning procedures and timeframes.
- (B) Procedures for removing the filter element from the VDECS and guidelines on how to visually inspect the device to asses whether routine cleaning and maintenance is adequate for proper cleaning.
- (C) Instructions on what to do in the event that special cleaning procedures and handling may be required.
- (D) All performance criteria used to determine a proper state of maintenance, such as the pressure drop across a fully-cleaned diesel particulate filter.
- (E) Any prohibitions or specific maintenance practices which may result in damage to the diesel emission control strategy.

In the interest of shared responsibility for proper VDECS installation and maintenance that staff has incorporated into the proposal, we request that language be added that outlines the responsibility of the maintenance and cleaning service provider for any damage caused by improper handling of the device. Damage due to improper cleaning or maintenance would not be covered under the manufacturers warranty if caused by a third party provider. Furthermore, on page 18 of the staff report, staff mentions that a manufacturer may require that service be provided by specific authorized providers if that service is offered free of charge under the manufacturer's device warranty. This language should be clearly articulated within the proposed regulation order. Furthermore, to insure that such a free service is not abused, it should be limited to cleanings under normal operating conditions with the engine in good repair. For



example if the engine is not maintained and burns oil excessively it may be cheaper for the owner to have the filter cleaned free of charge than to repair the engine. One approach may be to limit the total ash removal mass to that typically observed for an engine in good repair over the full warranty period. We would be happy to work with ARB staff to better quantify the values for normal ash accumulation. MECA would support a registry of cleaning service providers in much the same way as a registry of installers for on and off-road retrofit devices is offered on ARB website. In the case of a VDECS cleaner registry it should including a listing of the types of cleaning equipment available at the facility. Such a registry would serve multiple stakeholders. It would assist end-users in identifying facilities in their area that provide services using types of cleaning equipment recommended by their device manufacturer. This would provide a means for manufacturers to identify and train personnel at these facilities in specific handling and cleaning procedures for their specific devices. It would also identify which facilities are generating DPF ash associated waste and insure that workers are not exposed to unsafe conditions resulting from improper cleaning practices.

MECA members appreciate the changes made in section 2706 (t) governing the pre-installation compatibility between a VDECS and the candidate engine or vehicle. We recognize the need for installers to conduct a proper due diligence assessment of the engine prior to installing a VDECS and maintaining all records associated with that assessment leading to a conclusion of compatibility. Included in the regulation are specific documents that must be part of that assessment such as engine oil consumption records and the owner's compliance with engine manufacturer's recommended parts replacement schedules. Based on our members experience, oil consumption records are often absent from an owners maintenance log and a specific requirement of their inspection would leave an installer no choice but to reject a retrofit in the absence of such records. We believe that due to their frequent absence, oil consumption records are an inappropriate parameter on which to base pre-installation compatibility. Installers often use other measurable or visual criteria to make such assessments including smoke opacity and color, oil in the exhaust or visual inspection of injectors. MECA suggests that flexibilities be allowed as to the types of documents that may be used by an installer to complete their compatibility assessment. We agree that any compatibility assessment must be supported by measurement data and records that should be retained for the duration of the warranty period, however we recommend that specific assessment strategies be left up to the experience and expertise of the installers. As stated in the fleet rules, the owner is responsible for maintaining their engine to the manufacturer's specifications and delivering a properly operating engine to the installer. Language should be included in the proposed verification language outlining the owner's responsibility to maintain consistency with ARB's fleet regulations.

Section 2706 (t) specifies that within a given fleet at least 5 engines or 10% of each group must be data-logged. This is a substantial change from the earlier (June 18, 2009) version of the proposal and is very restrictive for off-road fleets which have fewer similar vehicles. For off-road fleets the proposed criteria in many cases would require data-logging of most engines within a fleet at a substantial cost to end users. Off-road



vehicles are designed for specific tasks and those vehicles perform primarily those tasks across fleets.

Another substantial change from the June 18, 2009 version of the proposal, is that section 2706 (t) specifies data-logging data outside of a common ownership fleet cannot be used for the purpose of pre-installation compatibility assessment. While data-logging is necessary for the purposes of pre-installation compatibility assessment for temperature sensitive devices, for every vehicle data-logged there is labor and hardware cost to carry out the activity. In order to create efficiency and reduce the cost of pre-installation compatibility assessments it is important for the installers and device manufacturers to fully utilize all their data experience, and be allowed the opportunity to utilize data across different fleets. This approach would reduce the number of vehicles requiring datalogging without reducing the effectiveness of the compatibility assessments.

In order to allow more flexibility in conducting and assessment of data-logging we recommend that sections 2706 (t) (1) (B) 1 and 2706 (t) (1) (C) 3 remove reference to "common ownership fleet". For still further flexibility, we recommend that ARB consider returning the entire section 2706 (t) (1) (B) to the original language of the June 18, 2009, version of the proposal.

MECA member companies are committed to developing and commercializing diesel retrofit technologies that cover a broad range of in-use engines and applications. The success of ARB's efforts to clean-up the broad mix of existing diesel vehicles and equipment operating within the state depends on developing a competitive, verified retrofit technology portfolio that provides end users with a variety of proven, cost-effective retrofit options from a number of suppliers. The proposed amendments will impact not only new verifications but may require modifications and extensions to some of the existing Executive Orders. We urge the Board and ARB staff to continue to support and adequately resource the verification program. Technology developers need a stable set of verification requirements that allows them to know, with some degree of certainty, what is required to commercialize and maintain their retrofit products in the California market. Changes to the verification protocols that add significant costs, or introduce undue risk, to the verification process or retrofit market need to be clearly justified in terms of their real benefits before they are approved.

An effective retrofit verification and in-use compliance program must achieve a delicate balance between two critical elements. It must ensure that the verification procedures and in-use durability requirements are sufficiently rigorous so that verified retrofit technologies meet emission performance levels over the operating life of the device. On the other hand, it must caution against overly burdensome procedures that would dissuade potential technology providers from attempting to verify their devices in California and divert their resources toward other emission control market opportunities. ARB's program and the amendments in this proposal have largely maintained that balance and clarified the ternary responsibility shared by the participants in the retrofit market including the owners, installers and the VDECS manufacturers.



In closing, we commend the Air Resources Board for its continuing efforts to provide the people of California with healthy air quality and for demonstrating true leadership in establishing an innovative verification and in-use compliance program. We thank ARB staff for its hard work and commitment in bringing forward the proposed improvements to the verification procedure and their willingness to work with all stakeholders throughout the regulatory process. Our industry pledges its commitment to continue to work with ARB to improve the verification requirements and to ensure that technologies and strategies are available to help achieve the objectives of California's Diesel Risk Reduction Plan.

## **Contact:**

Joseph Kubsh Executive Director Manufacturers of Emission Controls Association 1730 M Street, NW Suite 206 Washington, D.C. 20036

Tel.: (202) 296-4797 E-mail: jkubsh@meca.org

