

**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.**

**August 23, 2012**

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The Manufacturers of Emission Controls Association (MECA) is pleased to provide comments on 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 support the broad objectives of the proposal to further clarify the application requirement and reduce the costs of in-use compliance testing. We believe, however that some of the proposed new requirements impose additional costs and resource demands on both manufacturers and ARB. We believe that further consideration should be given to limit these changes to those that are absolutely necessary to benefit the performance and reliability aspects of VDECS.

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 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. This proposal represents the fifth time that the regulation has changed, or on average about once every two years. With each change in the verification protocol, MECA member companies have had to make additional investments to maintain existing verifications and support new ones. ARB's Diesel Risk Reduction Plan (DRRP) 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 applications. Now that over 10 years have passed, the mandatory retrofit component of the in-use fleet rules is nearing the end of its lifecycle. The reduction in market opportunity was accelerated by ARB's revision of the fleet rules as a result of the economic downturn. The December 2010 economic relief amendments to the fleet rules reduced the off-road retrofit requirements to a voluntary compliance option while the on-road retrofit opportunities were cut by more than 50%. In 2008, at the time the original truck and bus regulation was adopted,

the on-road retrofit projections for the first few implementation years were 38,000 per year starting in 2011. MECA members sold about 6,000 units in 2011. The 2010 amendments reduced the opportunity to about 15,000 in 2012 and manufacturers sold 3,000 retrofits in the first half of this year and have had to implement cost cutting measures. These numbers are significant because investments were justified and made years ago, based on the original forecasts. Given that the return on those investments has not been realized, means that any new costs associated with the verification requirements are severely scrutinized.

The proposed changes have been driven in part by the Boards recognition that VDECS manufacturers have been negatively impacted by the economy and the changes to retrofit requirements. We thank the Board for directing staff to incorporate relief provisions for VDECS providers as part of this proposal and we thank ARB staff for their efforts to work with MECA, installers and other stakeholders over the past 18 months to develop relief opportunities in the in-use testing component of the procedure. In particular we believe the increase to the sales triggers for initiating in-use compliance is representative of the market and the number of devices in the field. The ability to demonstrate Phase 1 compliance through functionality in the field is a pragmatic approach to insuring that devices are operating properly. We further appreciate the flexibility of the Alternative Test Schedule for in-use compliance which has been added. This proposal incorporates useful clarifications and improvements to the language. We support most of these clarifications to the extent that they conserve resources and reduce costs. Some of the changes to the verification process, however impart new requirements on manufacturers that represent implementation costs long after original investments to comply with prior revisions to the rule have been made. MECA believes that given the reduced opportunities remaining for manufacturers to recover expenses, any new changes to these regulations need to be scrutinized for their true, not perceived, benefit relative to the cost. MECA provides the following comments in the spirit of further clarifying and improving the verification process. We believe that the suggestions can improve the proposed amendments while ensuring that verified technologies will provide real emissions reductions.

MECA recognizes the need to add clarity and structure to the application process in Section 2702. We thank staff for their effort to delineate the four principal stages of the application process. MECA members experience has been that the verification process continues to take too long. Application extensions have often taken a year and new verifications two to four years. This far exceeds the time necessary for OEMs to certify a new engine or complete vehicle. Given that retrofit mandates for on-road vehicles will expire in 2016 leaves little incentive for manufacturers to invest in new verifications under the current application approval timeline. In the interest of further streamlining the process, we recommend some modifications to the process outlined in Section 2702. We are concerned that two of the four principal stages of a verification application that require ARB response have no deadline. The Engineering and Compliance Review of a complete application needs to have some timeframe for a response from ARB to move the process forward. MECA recommends a range of 60-90

days for this review, or 3 to 4.5 calendar months. Furthermore, there is no deadline for a completeness review of the final application while the preliminary application review must be finished in 30 days. We believe that the same 30 day response time, or six calendar weeks, would be reasonable to review the final application. By this stage there have been numerous opportunities to discuss the details of an application with manufacturers. We realize that in many cases, staff must request additional information from a manufacturer to complete or clarify an application. Our recommended response times assume that the response on the part of the manufacturer will take less than 10 days. In general we ask that the timeline for this process be reviewed and response times for all critical steps be quantified to provide applicants with an estimate of the time commitment involved in the verification process. Further opportunities should be taken to accelerate the process as much as possible.

MECA members recognize the potential need for ARB to see a market-ready device to insure that applicants have completed the design process before they apply for verification. The proposal states that the Executive Officer (EO) may select the size of the market-ready device for delivery to ARB within 30 days. MECA requests that the delivery time be extended to 60 days as all sizes may not be in stock and the tooling to build all sizes may not be ready at the time of a preliminary application. It may be necessary to order parts which may take longer than 30 days. We believe that the cost of providing a market-ready device is not insignificant and should be included in ARB's cost methodology. Although staff indicates that the parts will be returned to the applicant upon completion of the application process, manufacturers will not be able to sell a returned part to a customer as its condition cannot be guaranteed. Furthermore, although MECA members make every effort to incorporate all possible design considerations into a candidate retrofit system prior to submitting a preliminary application, it is unrealistic to assume that nothing will be learned or improved throughout the durability demonstration or testing phases of the verification process that would benefit the final VDECS. This new requirement represents a new cost to manufacturers which should be accounted for in the cost analysis of the rule.

We don't understand the need for adding Section 2706(x) as a new requirement for manufacturers. We believe that it will inadvertently tie-up staff resources and further encumber the verification and in-use compliance process. This section requires manufacturers to provide a copy of technical service bulletins and other information that is shared with installers, distributors or end users to ARB. Manufacturers share a variety of information with their dealers and authorized installers some of which may be business sensitive and confidential information. We recognize why ARB staff would want to be aware of technical issues with devices in the field, however we question the need for this duplicitous information exchange as any critical technical issues with devices are already part of a manufacturer's warranty report. At a minimum, MECA would like to propose a slight modification of the language in Section 2706(x) to narrow the information that must be submitted to ARB to technical information related to the terms of the Executive Order rather than "any" information that manufacturers share with their service network.

(x) Technical service bulletins, and other documentation relevant to the terms of the executive order such as proper operation, installation and maintenance of the diesel emission control strategy that is provided to end-users, authorized installers, or distributors must be submitted concurrently to ARB. Submission of such information does not relieve applicants from the design modification requirements of section 2702(j) nor does it constitute ARB approval.

MECA supports the clarification of existing safety considerations that an applicant must review in their application under Section 2706(w). Manufacturers believe that safety is an essential design element prior to demonstrating or deploying a DECS on a vehicle and this section articulates the aspects of safety that must be considered. We believe that referencing examples of existing safety standards as part of the regulation is important, as it provides quantifiable guidelines to applicants of the types of issues that need to be addressed. We like the example of relevant Federal Motor Carrier Safety Administration (FMCSA) exhaust system standards that are included in Section 2706(u) and believe that inclusion of similar language in Section 2706(w)2 would help define the types of testing and design considerations that may be requested by the EO with respect to device safety.

Although MECA supports functionally significant changes to operational monitors that improve the performance and reliability of retrofit systems, any changes to monitors need to be clearly justified and the costs considered. Many of our members invested in monitoring systems with data logging capabilities prior to any ARB requirement. Since the inclusion of data logging requirements, most of our members have already made multiple software and hardware changes. Continual redesign of monitors is costly for manufacturers that have made investments in the capabilities of their operational monitors based on previous requirements. Manufacturers may once again need to redesign system hardware and software to accommodate the new requirements in Section 2706(f). Repeated changes also represent hidden costs such as inventory of multiple monitors, training modules, rewriting product and service tools among others. Given the mature stage of the verification regulation and the limited remaining market opportunity for manufacturers to recover their investments, changes need to be scrutinized and limited to those that address system critical issues. At present, some of our members feel that tightly regulating the format of logged data offers little true value and that greater flexibility should be afforded. Indeed, there is concern that these changes will delay verifications in progress thus impeding the ability of manufacturers to recoup their investments. We request the Board to make these operational monitor changes effective for future verification applications received after the regulation is approved by OAL and not be made retroactive to existing verification applications in progress. Retroactive changes are very costly for manufacturers and should only be implemented when the performance or safety of devices is jeopardized. Furthermore, Section 2706(f)6 imposes new costs on manufacturers that are not accounted for in the cost methodology in Appendix C. Although connection hardware and software costs may not be significant, the cost of training ARB staff on their use and data interpretation is not insignificant and should be factored into Appendix C.

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. Several of the proposed amendments will impact future verifications and are likely to delay verifications in progress and may even require modifications and extensions to some of the existing Executive Orders. We urge the Board 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.

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 this proposal and their willingness to work with all stakeholders throughout the regulatory process. MECA hopes that the Board will consider our recommendations to the proposal as part of the 15-day change 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. Enforcement of the in-use fleet regulations is another essential component of achieving the emission goals of existing regulations and allow manufacturers to recoup their investments in verifying the enabling technologies used to deliver the necessary emission reductions.

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