

January 22, 2008

Clerk of the Board
Air Resources Board
1001 "I" Street, 23rd Floor
Sacramento, California 95814

Dear Members of the Board:

Re: Proposed Regulatory Amendments to the Verification Procedure, Warranty and In-use Compliance Requirements for In-use Strategies to Control Emissions from Diesel Engines

Engine Control Systems ("ECS"), a subsidiary of Catalytic Solutions Inc. of Oxnard, California has had the opportunity to review the above mentioned amendments. ECS appreciates the opportunity to provide the following comments and associated recommendations for the Board's consideration.

ECS supports staff's efforts to complete this regulatory amendment package to facilitate the continued implementation of diesel particulate reduction initiatives under the Diesel Risk Reduction Program.

ECS commends the efforts of ARB staff to ensure progress is made towards these diesel risk reduction goals. We realize this particular rulemaking is a principal component in ensuring continued success. We are impressed with the staff's ability to work closely with technology providers and end-users alike on matters both technical and practical in nature. We look forward to a continued and collaborative relationship with ARB towards the common goal of improved air quality in California.

ECS is pleased to indicate its support for the vast majority of the proposed amendments.

With regards to specific amendments, we offer comments organized in the following format for the board's consideration.

Weighting of 25 hr and 1000 hr NO₂ measurements

ECS believes that the current weighting factors used for NO₂ measurements (equal weighting after 25 and 1000 hrs) may not represent NO₂ emissions in real world applications, and especially for non-road applications. These laboratory based measurements which are conducted on low-use laboratory engines under controlled conditions have the potential to overestimate NO₂ emissions compared to actual in-use measurements. In particular, ECS

believes the NO₂ measurement conducted at the 25 hr point has the potential to greatly inflate observed values. Rather than evaluate the validity of the 25hr test point or the broader procedure, ECS believes it would be better to examine the merit of adjusting the current 25hr and 1000hr weighting factors based upon in-use measurements of NO₂.

We encourage ARB staff to conduct first hand measurements of NO₂ in the field from VDECS and use this experience to consider the amendment of weighting factors to be used for lab engine measurements if so indicated. An ideal opportunity for such testing and data gathering may be the upcoming off-road retrofit showcase that will be conducted in the South Coast.

ECS believes the value in this proposal is that it does not require VDEC's manufacturers to re-test but rather to simply re-calculate their NO₂ values for compliance purposes while still allowing ARB to protect the public health.

Flow Directionality of VDEC's

ECS employs flow direction labels on all of its Level 3 verified devices and supports the use of flow direction labels on all Level 3 VDEC devices to minimize unintentional reversing of DPf centerbodies.

ECS believes that the additionally proposed requirement of modifying the design of devices to ensure that they can only be installed in one direction poses unnecessary costs to manufacturers and fleet owners. This represents a significant change to the verification requirements that warrants further justification by ARB. ECS also notes that such a requirement is not placed on OEM filters installed on 2007 and newer model year trucks.

The costs of re-designing, re-tooling, inventory, part duplication and tracking of newly designed parts and replacement parts for existing devices will tie up resources and impact the cost and complexity of supplying current product as well as divert resources from the development of new products. We believe that this proposed requirement, if approved, will result in a significant drain on ARB staff resource addressing requests for parts changes from currently verified manufacturers. We believe that this requirement may be met by other means such as requiring clearly visible labeling of the flow direction, proper training of installers, clear and consistent guidelines of acceptable practices in device owners manuals and enforcement by ARB officials in the field. ECS is committed to working with ARB verification and enforcement staff to develop a mutually agreeable solution and ask the board to direct this requirement back to staff for further review and industry consultation.

VDEC Device and Engine Labels

ECS believes that engine and device labels should be distinctly different to eliminate the possibility of attaching a replacement engine label to an improper VDECS or counterfeit device. These safeguards would also support enforcement efforts aimed at insuring that appropriate and genuine VDECS are properly installed. We would like to work with ARB including enforcement staff to further define labeling practices that meet the goals of the verification program, safeguard against improperly labeled devices and minimize the cost and time of end users obtaining replacement labels.

Device Swapping

ARB's has included in the proposal revisions that VDEC manufacturers obtain Executive Officer approval if they authorize the practice of removing VDECS from vehicles and reinstalling them on other vehicles. ECS proposes that ARB staff should amend the verification application to include specific sections where manufacturers can provide information at the time of verification about the swapping of entire devices or components (i.e. DPF centerbodies to facilitate cleaning). For currently verified devices, manufacturers would simply have to submit these sections to staff for review.

We recognize that vehicle owners may want to swap devices or components from retired vehicles to other vehicles remaining in the fleet. Vehicle operators will also undoubtedly want to re-sell used devices that may be removed from vehicles being retired or at the time of vehicle recycling.

We request that ARB clarify the impact of swapping or re-selling of retrofit devices on the manufacturer's warranty. Furthermore, ARB staff should include a clause in the executive orders associated with verified devices that would require end users to obtain permission from the device manufacturers prior to reinstalling a device on another vehicle.

Impact of new requirements on VDEC manufacturers and ARB resources

ECS accepts that continued revisions to the current verification procedures will likely continue to be needed to insure success of the Diesel Risk Reduction program.

However, it is important that any revision be supported by thorough analysis to not only justify the revision but that also assesses the ability of ARB staff and VDEC manufacturer resources to respond to the amendments without delaying current and near future verification activities. The majority of currently verified devices have undergone subsequent verification extensions. Moreover, additional verification extensions of these products are likely to continue.

Amendments to the verification procedures have the potential to force manufacturers and ARB to invest significant additional resources to review currently verified products at the time of extension or as a direct requirement of the amendment. This revisiting of existing verifications to insure compliance to verification procedure amendments can result in a significant delay or interruption of new product verifications due to the increased demand on manufacturer and ARB staff resources. For these reasons, it is also our company's position that amendments to the verification procedure are potentially more damaging to existing VDEC manufacturers as their portfolio of verified products represents a greater compliance burden when revisions are made.

For these reasons, ECS recommends that ARB staff consider the phasing in of amendments for existing VDEC's even if an additional related verification activity is filed.

Technology developers need greater stability in regards to 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 to retrofit devices or the verification process 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 implementing the Diesel Risk Reduction Plan and in establishing an innovative verification and in-use compliance program. ECS can conditionally support these proposed amendments based upon the issues addressed in our comments.

If you should have any questions, or need additional information, please do not hesitate to contact me. Thank you.

Yours truly,



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