Manufacturers of Emission Controls Association
2020 14th Street North
Suite 220
Arlington, VA 22201
(202) 296-4797 FAX: (877)-303-4532

June 22, 2012

Cherie Rainforth
Manager, Control Strategies Section
Stationary Source Division
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Subject: MECA's Recommendations for 15-day changes to the Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards Regulation

Dear Ms. Rainforth:

MECA is pleased to provide written comments to the 15-day changes proposed under ARB's Modifications to the Proposed Amendments to the Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards that were adopted by the Board on September 22, 2011. As we stated in both our written and oral testimony, MECA supported the original proposed regulatory language and we thank the ARB for the opportunity to work with staff to refine several of the points where we have further recommendations. MECA provides our comments in the spirit of striving to further improve the proposed 15-day modifications. We believe that these suggestions can substantially improve the regulation to ensure that real emission reductions and air quality benefits from CHE engines and vehicles are achieved.

The importance of proper engine maintenance cannot be overemphasized for the durability and long term performance of the cargo handling vehicle, its engine and DPF. Regular maintenance becomes critical once a DPF is installed because the presence of smoke in the exhaust can no longer be used as an indicator of engine operation problems. High smoke opacity could be a sign of excessive oil consumption or a bad fuel injector, both of which result in high engine out PM that may result in plugging of the filter. MECA fully supports the inclusion of the mandatory opacity-based monitoring program as part of the amendments to the regulation. An opacity test is an inexpensive, simple measurement that should be an integral part of a proactive preventative maintenance program. This measurement has been required for on-highway vehicles for some time whereas it is a new procedure for off-road fleets. The SAE standard (J1667) provides a recommended practice for performing an opacity measurement that is applicable to both on-road and off-road vehicles. In fact, EPA off-road engine certifications provide the opacity limit that the engine was certified to as well as the PM mass standard. Performing an annual opacity measurement is a way for fleets to actively monitor the condition

of their engines and perform the necessary maintenance to keep their equipment functioning at the engine manufacturers recommended standards. This will have the added co-benefit of reduced emissions from all of the CHE and better performance and longer vehicle life for fleet owners.

MECA understands the reason that the provision to the opacity performance standard has been added as part of the 15-day changes under Sections 2479(e)(2)A(5)j and 2479(e)(3)A(3)k to exempt 2009 or newer model year engines from opacity measurements until January 1, 2013 or four years after the model year of the engine. Several of our members have shared with me their experience with opacity measurements on Tier 3 equipment. Even brand new Tier 3 engines may exhibit higher opacity than Tier 2 certified engines. Within a few thousand hours the opacity on some of these engines is significantly above the OEM certification values. Furthermore, MECA members experience is that many machines used in cargo handling operations are used around the clock and therefore may accumulate more than 2,000 engine hours per year. Therefore over the period of their exemption from opacity monitoring, they would exceed the full useful life of the engine that manufacturers use to certify off-road equipment which is 8,000 hours. I understand that the four year exemption was based on a precedent set for highway heavy-duty trucks, however, on-road vehicles don't see the around the clock heavy use that CHE equipment is subjected to. Additionally if an operator waits for four years before checking the engine out opacity, fleets won't have any reference point as to what the normal opacity for that engine should be and will likely use the four year value as the baseline. The experience of VDECS manufacturers is that many of these machines will already have elevated opacity by the time they are four years old as the opacity values reported in the EPA engine certification are typically substantially higher than a highway engine.

We would recommend that as new engines are put into service, they be required to measure and record a baseline engine out opacity value for the engine. Furthermore, due to the high rate of operation for this equipment the opacity measurement exemption should be limited to four years or 4,000 hours after the model year of the engine, whichever comes first. These suggested revisions will ensure that cargo handling maintenance personnel have the required opacity documentation from which to determine if the opacities observed after 4000 engine hrs require maintenance to address.

We thank ARB staff for their consideration of our recommendations.

Best regards,

Rasto Brezny
Deputy Director
Manufacturers of Emission Controls Association