

**STATEMENT OF THE  
MANUFACTURERS OF EMISSION CONTROLS ASSOCIATION  
ON THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSAL:  
GREENHOUSE GAS EMISSIONS STANDARDS AND FUEL EFFICIENCY  
STANDARDS FOR MEDIUM- AND HEAVY-DUTY ENGINES AND VEHICLES –  
PHASE 2**

*August 6, 2015*

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My name is Dr. Joseph Kubsh. I am the Executive Director of the Manufacturers of Emission Controls Association, or MECA. MECA is pleased to provide comments in support of the U.S. EPA's proposed rulemaking to establish medium- and heavy-duty greenhouse gas emission standards and corporate average fuel economy standards for model years 2018 and beyond. We believe an important opportunity exists to continue to reduce greenhouse gas emissions and improve fuel economy from medium- and heavy-duty engines and vehicles by applying the fundamental regulatory structure that has been effective under the first phase of these standards.

MECA is a non-profit association of the world's leading manufacturers of emission control technology for mobile sources. Our members have over 40 years of experience and a proven track record in developing and manufacturing emission control and efficiency technology for a wide variety of on-road and off-road gasoline and diesel fueled vehicles and equipment in all world markets. Now that regulated pollutants have been expanded to include CO<sub>2</sub>, the portfolio of products offered by our members has expanded to technologies that impact combustion efficiency and improve the overall CO<sub>2</sub> emissions of the powertrain. The mobile source emissions control industry has generated hundreds of billions of dollars in U.S. economic activity since 1975 and supports more than 65,000 U.S. jobs, mostly in product development and manufacturing. EPA's proposed Phase 2 emissions and efficiency standards will provide additional support for the continued development of a thriving U.S. industry focused on a wide range of technologies that can reduce vehicle emissions and improve fuel efficiency.

MECA would like to offer the following comments on specific aspects of EPA's Phase 2 proposal:

1. MECA strongly supports the continued use of separate engine and vehicle standards included in the Phase 2 proposal. This framework developed for the Phase 1 heavy-duty standards ensures the continued important testing linkage between engine criteria and greenhouse gas emissions, and ensures that manufacturers deliver durable, enforceable improvements to truck fuel efficiency.
2. MECA believes that cost effective technical solutions will be available to allow for the faster 2024 implementation timeline included in EPA's proposal. Manufacturers need this regulatory certainty to continue to make needed investments on technologies that will deliver these reductions.
3. MECA supports EPA's proposal to lower the cap on N<sub>2</sub>O emissions from 100 to 50 mg/bhp-hr. This tighter N<sub>2</sub>O cap will be challenging in the expected future of lower exhaust temperatures associated with improved engine efficiencies but manufacturers

- have a number of technical opportunities available to them to keep N<sub>2</sub>O emissions at low levels, including improved catalyst formulations, ammonia slip catalysts with high selectivity for nitrogen formation, and efficient urea dosing strategies.
4. MECA supports EPA's proposal to close the current emissions loophole on truck glider kits. The legacy of dirty diesel engines on America's roads needs to be put in our rear view mirror. All new trucks need to utilize the clean diesel engine options that have been available since 2010. MECA asks EPA to consider an earlier closing of the glider truck loophole instead of waiting until 2018 to get these dirty diesel options off the table.
  5. MECA believes that future auxiliary power unit PM emissions should be controlled through the application of proven diesel particulate filter technology to these small off-road engines. There are already examples of small off-road diesel engines engineered with filter solutions that include active regeneration. EPA should follow California's lead and implement policies for APU engines that force the application of cost effective filter solutions on these engines.

Finally, MECA believes that significant further reductions in NO<sub>x</sub> emissions from new heavy-duty on-road diesel engines beyond the 2010 highway requirements will be possible through the combinations of more advanced diesel engines with evolutionary improvements to the growing suite of advanced diesel exhaust emission control technologies including high cell density, low thermal mass substrates, improved SCR catalyst systems coated directly on filter substrates, and advanced oxidation catalysts that include passive NO<sub>x</sub> absorber capabilities. Clean diesel emission technologies have expanded and matured considerably since EPA finalized their heavy-duty 2007-2010 NO<sub>x</sub> emission standards nearly 15 years ago in late 2000. The application of SCR technology on diesel engines has allowed engine manufacturers to optimize diesel engines for both low NO<sub>x</sub> emissions and improved fuel efficiency and we believe that these optimizations can continue in the future to allow diesel engines to further reduce both CO<sub>2</sub> and NO<sub>x</sub> emissions. Advanced diesel emission control technologies are currently being evaluated in a California-sponsored test program to demonstrate the capabilities to meet a 0.02 g/bhp-hr NO<sub>x</sub> standard without negatively impacting CO<sub>2</sub> emissions. Results from this test program are expected before the end of next year. The emission reduction benefits achieved through the deployment of advanced diesel emission control technologies are focused on delivering NO<sub>x</sub> reductions during the cold transient portion of the test cycle and to improving NO<sub>x</sub> emissions performance in low temperature duty-cycle operations. Additional NO<sub>x</sub> reductions from heavy-duty engines will provide important cost-effective reductions for regions of the country with current and future ozone non-attainment issues. MECA asks EPA to initiate a rulemaking that will further reduce NO<sub>x</sub> emissions from heavy-duty engines as soon as possible to allow manufacturers to work with their customers on delivering fully optimized future engines that deliver improved fuel efficiency and ultra-low NO<sub>x</sub> emissions.

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