NACAA
national association of clean air agencies

Testimony of the
National Association of Clean Air Agencies
before the
U.S. Environmental Protection Agency
and the
National Highway Traffic Safety Administration
on the
Proposed Greenhouse Gas and Fuel Efficiency Standards for
Medium- and Heavy-Duty Engines and Vehicles – Phase 2
Docket ID No. EPA-HQ-OAR-2014-0827

August 6, 2015
Chicago, Illinois

The National Association of Clean Air Agencies (NACAA) appreciates this opportunity to provide testimony on the U.S. Environmental Protection Agency's (EPA) and the U.S. Department of Transportation National Highway Traffic Safety Administration's (NHTSA) Proposed Phase 2 Greenhouse Gas and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles, as published in the *Federal Register* on July 13, 2015 (80 Fed. Reg. 40,137). NACAA is a national, non-partisan, non-profit association of air pollution control agencies in 41 states, the District of Columbia, four territories and 116 metropolitan areas. The air quality professionals in our member agencies have vast experience dedicated to improving air quality in the U.S. This testimony is based upon that experience. The views expressed in this testimony do not represent the positions of every state and local air pollution control agency in the country.

According to EPA, although heavy-duty trucks account for less than 5 percent of vehicles on U.S. roads, they are responsible for about 20 percent of the U.S. transportation sector's energy use and GHG emissions and are the second largest source of GHG emissions in the transportation sector after passenger cars and light trucks. These vehicles consume about 2.5 million barrels of oil a day and produce almost a half billion tons of carbon a year.

NACAA supported EPA's and NHTSA's efforts to adopt the first phase of GHG and fuel efficiency standards for heavy-duty vehicles and engines, which took effect with Model Year (MY) 2014 and is being phased in through MY 2018. Now, we are pleased to support your agencies' efforts to advance this program by establishing Phase 2 standards. We believe your proposal holds great promise for achieving further GHG reductions and better fuel efficiency from heavy-duty combination tractors, trailers, vocational vehicles and heavy-duty pickups and vans. Fulfilling that promise, however, will require some key improvements to the proposal.

But before addressing those, NACAA would like to commend EPA and NHTSA on several of the various aspects of the proposed rule that our association strongly supports. First, we fully endorse the continued inclusion of separate but complementary standards for engines and full vehicles – this is a fundamental aspect of the rule. Second, the inclusion of standards for trailers, particularly box trailers, is critical given their significant contribution to fuel consumption by long-haul trucks. Third, we are very much in favor of EPA's proposal to close the existing loophole for glider kits, under which used pre-2013 engines – with no limit on age – may be installed into new glider kits without meeting applicable standards. We agree with EPA that its regulations should be revised to require that only engines that have been certified to meet the prevailing standards be eligible for installation into new glider kits.

Now NACAA would like to highlight aspects of the rule our association believes should be improved.

In a March 18, 2015 letter to your respective agencies,[1] NACAA provided our recommendations for essential components of a Phase 2 rule. In those recommendations, we urged for a rule that would reduce GHG emissions and fuel consumption across the entire fleet by at least 40 percent, on average, compared to 2010. Unfortunately, we find the overall effectiveness of the Phase 2 proposal to fall short of our recommendation and, more importantly, significantly short of what can and should be achieved. Accordingly, we believe the overall stringency of the proposal should be enhanced to take advantage of missed opportunities that, if incorporated into the final rule, would drive technology and ensure that maximum benefits are gained.

Toward this end, we believe the proposed engine standard must be strengthened. Others – including the California Air Resources Board (CARB),[2] engine makers[3] and independent non-governmental organizations[4] – have suggested engine efficiency can be improved by 15 percent or more, compared to the 4.2 percent proposed by EPA. Further, their analyses, as well as those of EPA, indicate that technologies to achieve this degree of improvement are currently available and highly cost effective. We believe it is imperative that EPA strengthen the engine standard in the final rule to reflect this.

With respect to timing, NACAA strongly supports EPA's proposed Alternative 4, under which the standards would be fully implemented by 2024. This implementation deadline is entirely feasible and vitally important to spur much-needed near-term emissions reductions and technological innovation. NACAA urges EPA to finalize Alternative 4 rather than Alternative 3, which would unnecessarily extend full implementation by three years to 2027.

Our March 18, 2015 letter also included a recommendation that EPA articulate in the proposal the need for significantly lower national heavy-duty nitrogen oxide (NO_x) standards beyond the current 2010 onroad heavy-duty NO_x exhaust emission standards and nonroad heavy-duty engine exhaust emission standards. We are very disappointed that EPA has not included such a discussion in this proposal.

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[1] NACAA Letter to EPA and NHTSA providing recommendations on a Phase 2 regulatory proposal (March 18, 2015), http://www.4cleanair.org/sites/default/files/Documents/NACAA-Letter_to_EPA_DOT-Ph2_HD_Fuel_EffGHG_Stds-031815.pdf.

[2] California Air Resources Board, *Draft Technology Assessment: Engine/Powerplant and Drivetrain Optimization and Vehicle Efficiency* (June 2015), http://www.arb.ca.gov/msprog/tech/techreport/epdo_ve_tech_report.pdf.

[3] Cummins, *Engine Technologies for GHG and Low NO_x* (April 2015), http://www.arb.ca.gov/msprog/onroad/caphase2ghg/presentations/2_7_wayne_e_cummins.pdf.

[4] International Council on Clean Transportation, *Advanced Tractor-Trailer Efficiency Technology Potential in the 2020-2030 Timeframe* (April 2015), http://www.theicct.org/sites/default/files/publications/ICCT_ATTEST_20150420.pdf.

Although there is the potential for ancillary NO_x reductions from the Phase 2 rule, the achievement of these reductions is not certain (we note that predicted ancillary benefits of Phase 1 did not occur). Moreover, even if ancillary NO_x benefits do accrue under the Phase 2 rule, they will not be nearly sufficient given the challenges state and local agencies face in attaining and maintaining current and upcoming ozone and fine particulate matter (PM) standards and protecting against visibility impairment and eutrophication of water bodies. We urge that EPA include in the final Phase 2 rule a clear and comprehensive discussion of the need for very substantial additional NO_x reductions from heavy-duty vehicles and engines and, even more critically, an explicit commitment to begin immediately a separate rulemaking initiative to capture those reductions.

Finally, EPA projects an increase in the use of auxiliary power units (APUs) in Phase 2 and an associated 10-percent increase in PM emissions. The agency seeks comment on this, but proposes nothing to address the unacceptable and unnecessary expected rise in PM pollution. NACAA recommends that EPA include in the final rule a requirement, similar to CARB's, that APUs be equipped with diesel particulate filters to capture the PM.

In conclusion, NACAA believes EPA and NHTSA have a tremendous opportunity to finalize a rule that will effectively address heavy-duty vehicle and engine GHG emissions and fuel consumption and set the stage for a separate rule to achieve meaningful additional NO_x reductions. We urge you to make the most of this opportunity. Further, in doing so, we encourage that your agencies collaborate with experts at CARB, given California's unique ability to regulate these same source categories, its decades of experience in doing so and the past success that has been achieved when EPA, and more recently NHTSA, have collaborated with CARB.

In the coming weeks, we will continue to study issues related to the Phase 2 proposal and will offer additional comments in writing by the September 17, 2015 deadline. In the meantime, we appreciate the chance to provide the comments we have offered today and look forward to continuing to work with EPA and NHTSA on this important initiative.