

NESCAUM Comments

October 23, 2009 Public Hearing – New York City, NY

US EPA Notice of Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards

Good morning, my name is Coralie Cooper. On behalf of the Northeast States for Coordinated Air Use Management (NESCAUM), I am providing comments today regarding the Agency's Notice of Proposed Rulemaking to establish light-duty vehicle greenhouse gas emission standards and corporate average fuel economy standards. In addition to today's testimony, NESCAUM intends to provide detailed written comments prior to the submittal deadline.

NESCAUM applauds EPA for taking an extremely important step towards reducing transportation-related greenhouse gas emissions. The proposed rule, once implemented, will reduce light duty vehicle greenhouse gas emissions 21 percent by 2030. The proposed rule will also help us as a nation to reduce our dependence on petroleum. Fuel used to power light duty vehicles accounts for a full 40 percent of all the oil consumed in America and the proposal, when implemented, will reduce oil consumption by approximately 1.8 billion barrels over the lifetime of the vehicles that will sold in model years 2012 to 2016, and will provide additional savings beyond 2016.

NESCAUM supports the proposed emissions standards as technically feasible and cost effective in the timeframe proposed. In 2004, NESCAUM's sister organization, NESCCAF, conducted a comprehensive study on the technical feasibility and costs of reducing light duty vehicle GHG emissions. The study found that technologies that are already commercialized, such as turbocharging and downsizing, variable valve timing and lift, and gasoline direct injection, provide substantial GHG reductions while maintaining the performance of vehicles. Examples of performance measures are 0 to 60 miles per hour acceleration and towing capacity. These and other available and cost effective technologies will likely be used by manufacturers to meet the standards proposed by EPA in its GHG NPRM.

Consumer Choice

EPA has crafted the proposal in a way that will ensure consumers will continue to have the variety and choice in vehicle models they have come to expect. The size-based standard provides manufacturers with significant flexibility in meeting the proposed GHG reductions. Furthermore, as mentioned above, technologies to reduce vehicle GHG emissions exist in the market today. The phase-in of the standards between 2012 and 2016 allows manufacturers seven years to incorporate these technologies into a greater numbers of vehicles.

Safety

In its regulatory impact statement, EPA estimates that vehicle manufacturers will reduce the weight of their vehicles by approximately 4 percent on average between 2011 and 2016. The safety analysis presented by NHTSA in Section IV of the preamble was based on a thorough review of historical data regarding the relationship between mass reduction, wheel base, track width, and fatality risk published in 2003 by Dr. Charles Kahane. Dr. Kahane concluded that a heavier vehicle is safer than a lighter one based on the assumption that vehicle mass reductions are accompanied with vehicle size and footprint reductions. The study did not evaluate vehicle mass reductions which are not accompanied by vehicle size reductions.

A study conducted by Dynamic Research Incorporated (DRI) in 2005 did assess the independent effects of vehicle weight and size on safety in order to determine if there are tradeoffs between improving vehicle safety and fuel consumption. This study was published by the Society of Automotive Engineers and was peer reviewed prior to publication. The results of that study indicate that vehicle weight reduction tends to decrease fatalities, but vehicle wheelbase and track reduction tends to increase fatalities. The DRI analysis concluded that there would be small additional reductions in fatalities for cars and trucks if the weight reduction occurs without accompanying vehicle footprint or size changes.

Vehicle mass can be reduced without reducing the size, footprint, or structural integrity of the vehicle. A number of approaches such as material substitution – the substitution of higher strength steel, aluminum, magnesium or composite materials in components currently fabricated from steel, can decrease weight and maintain structural integrity and crash worthiness relative to previous designs while providing a net decrease in component weight. NHTSA and EPA have taken two measures to help ensure that the proposed rules provide no incentive for mass reduction to be accompanied by a corresponding decrease in the footprint of the vehicle – which can decrease crush and crumple zones. One of these measures includes the establishment of the footprint-based standard. In fact, EPA projects that automakers will not reduce vehicle footprints in order to meet the proposed CO₂ standards.

NESCAUM requests that EPA and NHTSA include the DRI study in its evaluation of safety issues associated with this rule.

Pollutants included in Proposal

NESCAUM commends EPA for proposing to regulate nitrous oxide, methane, and hydrofluorocarbons in addition to CO₂. These gases have very high global warming potential and as such should be regulated in addition to CO₂. We ask that the agency include other pollutants, such as black carbon (which is a potent greenhouse forcing agent), in the final rule.

We thank the Agency for the opportunity to comment on this proposal.