

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator McCarthy:

Enclosed for your consideration is the report of the Small Business Advocacy Review Panel (SBAR Panel or Panel) convened for EPA's planned proposed rulemaking entitled "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2" (or "Phase 2"). This notice of proposed rulemaking is being developed by the U.S. Environmental Protection Agency (EPA) under the Clean Air Act (CAA).

EPA's Phase 1 Heavy-Duty Engines and Vehicles Program, which was finalized in September 2011, marked the first greenhouse gas emissions standards for heavy-duty vehicles and engines. The program addressed heavy-duty's GHG emissions through the adoption of performance-based standards that allow manufacturers to determine the optimal mix of technologies to achieve the necessary reductions for their vehicle fleets and engines.

Building on the Phase 1 rule, this proposed Phase 2 rule would be designed to reduce GHG emissions associated with the transportation of goods across the United States post-2017. The proposed Phase 2 rulemaking considers changes to existing engine and vehicle GHG standards, as well as regulatory standards and certification requirements for previously-unregulated new trailers pulled by semi-tractors. If such a rule is adopted, manufacturers of heavy-duty engines, chassis, vehicles and trailers could be required to incorporate GHG-reducing and fuel-saving technologies in order to comply with EPA's performance-based standards.

On October 22, 2014, EPA's Small Business Advocacy Chairperson convened this Small Business Advocacy Review (SBAR) Panel under section 609(b) of the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). In addition to its chairperson, the Panel consists of the Director of the Assessment and Standards Division within EPA's Office of Transportation and Air Quality, the Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget (OMB), and the Chief Counsel for Advocacy of the Small Business Administration (SBA). It is important to note that the Panel's findings and discussion are based on the information available at the time this report was written. EPA is continuing to conduct analyses relevant to the proposed rule, and additional information may be developed or obtained during this process as well as from public comment on the proposed rule. The options the Panel identified for reducing the rule's economic impact on small entities may require further analysis and/or data collection to ensure that the options are cost effective, practicable, enforceable, protective of public health, environmentally sound and consistent with the CAA.

Summary of Small Entity Outreach

Before beginning the formal SBREFA process, EPA actively engaged in outreach with entities that would potentially be affected by the upcoming rulemaking. EPA held phone conferences and face-to-face meetings with many of these companies to discuss the upcoming proposed rulemaking and to provide these contacts with an early opportunity to ask questions and discuss their concerns with the upcoming rulemaking.

Prior to convening the Panel, EPA conducted outreach with small entities that will potentially be affected by these regulations. On April 2, 2014, EPA issued a press release to solicit potential small entity representatives (SERs) to participate. In June 2014, EPA invited SBA, OMB, and ten potentially affected SERs to a conference call and meeting, and solicited comments from them on preliminary information sent to them. EPA shared the small entities' written comments with the Panel as part of the Panel convening document.

After the SBAR Panel was convened, the Panel distributed additional information to the SERs on October 22, 2014, for their review and comment in preparation for another outreach meeting. On November 5-6, 2014, the Panel met with SERs representing 13 small businesses (in three separate meetings by industry) to hear their comments on the information distributed in these mailings. The SERs were asked to provide written feedback on ideas under consideration for the proposed rulemaking and responses to questions regarding their experience with existing CO₂-reducing technologies. The Panel received written comments from the SERs in response to the discussions at these meetings and we have summarized them in the Panel Report that is attached. Their full written comments are also attached (see Appendix B of the Panel Report). In light of these discussions and comments, the Panel considered the regulatory flexibility issues specified by RFA/SBREFA and developed the findings and discussion summarized below.

Panel Findings and Discussion

Under section 609(b) of the RFA, the Panel is to report its findings related to these four items:

- A description of an estimate of the number of small entities to which the proposed rule will apply.
- A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record.
- Identification, to the extent practicable, of all relevant federal rules which may duplicate, overlap or conflict with the proposed rule.
- A description of any significant alternatives to the planned proposed rule which would minimize any significant economic impact of the proposed rule on small entities consistent with the stated objectives of the authorizing statute.

The Panel's most significant findings and discussion with respect to each of these items are summarized below. To read the full discussion of the Panel findings and recommendations, see Section 9 of the Panel Report.

Number and Types of Entities Affected

EPA identified 115 trailer manufacturers and 100 of them are small. Currently 24 vocational chassis manufacturers have registered with EPA under the Phase 1 rulemaking and three have confirmed small entity status to obtain an exemption for MY 2014. Twenty alternative fuel engine converters are currently registered with EPA to certify their converted HD engines for criteria pollutants. Eighteen of those engine converters are small. EPA is aware of four glider manufacturers and three of these companies are small businesses.

General Potential Reporting, Recordkeeping and Compliance Burdens

For any emission control program, EPA must have assurances that the regulated products will meet the standards. The program that EPA is considering for manufacturers subject to this proposal will include testing, reporting, and recordkeeping requirements. Testing requirements for these manufacturers could include use of EPA's Greenhouse gas Emissions Model (GEM) vehicle simulation tool to obtain the overall CO₂ emissions rate for certification of vocational chassis and trailers, aerodynamic testing to obtain aerodynamic inputs to GEM for some trailer manufacturers and engine dynamometer testing for alternative fuel engine converters to ensure their conversions meet the proposed CO₂, CH₄ and N₂O engine standards. Reporting requirements would likely include emissions test data or model inputs and results, technical data related to the vehicles, and end-of-year sales information. Manufacturers would have to keep records of this information.

Related Federal Rules

The Phase 1 rulemaking would continue to be in effect in the absence of this proposed rule. The Panel is also aware of several other state and Federal rules related to heavy-duty vehicles and to the proposed Phase 2 rule under consideration. DOT/NHTSA has several safety requirements for these vehicles. California adopted its own greenhouse gas initiative, which places aerodynamic requirements on trailers used in long-haul applications. None of these existing regulations were found to conflict with the proposed rulemaking.

The Panel recognizes that there is the potential for a tension between technologies to improve fuel efficiency and some other Federal mandates, such as NHTSA safety regulations, EPA emissions standards for criteria pollutants, and EPA transportation fuel blending requirements for biofuels. EPA sought information from SERs on many of these tensions and flexibilities that could aid small businesses in complying with these multiple mandates and will continue to seek comment on them in the rulemaking development process.

Regulatory Flexibility Alternatives

As described above, EPA is developing standards for medium- and heavy-duty engines and vehicles to be addressed in this rulemaking. Because of the potential costs and technology challenges involved in meeting these standards, the Panel recommends that EPA consider and seek comments on the flexibility options described below. We believe that the following set of flexibility options, taken together, have the potential to significantly reduce compliance burden for small manufacturers without significantly compromising the environmental benefits of the program.

Trailers

Comments from trailer manufacturer SERs indicate that these companies are familiar with most of the technologies described in the materials, but have no experience with EPA certification and do not anticipate they could manage the accounting and reporting requirements without additional staff and extensive training. Performance testing, which is a common requirement for many of EPA's regulatory programs, is largely unfamiliar to these small business manufacturers and the SERs believe the cost of testing would be a significant burden on their companies. In light of this feedback, the Panel recommends a combination of streamlined compliance, which minimizes tracking and testing requirements, and targeted exemptions for these small businesses. The Panel believes these strategies will achieve many of the benefits for the environment by driving adoption of CO₂-reducing technologies, while significantly reducing the burden that these new regulations would introduce on small businesses.

Box Trailers

Box trailer manufacturers have the benefit of relying on the aerodynamic technology development initiated through EPA's voluntary SmartWay program. The Panel is aware that EPA is planning to propose a simplified compliance program for all manufacturers, in which aerodynamic device manufacturers have the opportunity to test and register their devices with EPA as technologies that can be used by trailer manufacturers in their trailer certification. This pre-approved technology strategy is intended to provide all trailer manufactures a means of complying with the standards without the burden of testing. At the time of this report, it is unclear if this strategy will be available indefinitely, or if it will be an interim flexibility to allow manufacturers to ease into a testing-only compliance program. In the event that this strategy is limited to the early years of the trailer program for all manufactures, the Panel recommends that small manufacturers continue to be given the option to use pre-approved devices in lieu of testing.

In the event that small trailer manufacturers adopt pre-approved aerodynamic technologies and the appropriate tire technologies for compliance, the Panel does not believe it is necessary to require the use of a vehicle emissions model, such as GEM, for certification. Instead, the Panel believes it could be possible for manufacturers to simply report to EPA that all of their trailers include approved technologies.

Non-Box Trailers

The Panel recommends that EPA not require the installation of aerodynamic devices for non-box trailers. Some of the non-box trailer manufacturers SER have seen prototype-level demonstrations of aerodynamic devices on non-box trailers. However, most non-box trailer SERs identified unique operations in which their trailers are used that preclude the use of those technologies and many that they have seen used on box trailers today.

Some non-box trailer manufacturers have experience with lower rolling resistance (LRR) tires and automatic tire inflation (ATI) systems. However, the non-box trailer manufacturer SERs indicated that LRR tires are not currently available for some of their trailer types. The SERs noted that tire manufacturers are currently focused on box trailer applications and there are only a few LRR tire models that meet the needs of their customers. The Panel believes EPA should ensure appropriate availability of these tires in order for it to be deemed a feasible means of achieving these standards and recommends a streamlined compliance process based on the availability of technologies. The Panel suggests that the best compliance option from a small business perspective would be for EPA to pre-approve tires once they are available in sufficient quantities on the market, similar to the approach being proposed for aerodynamic technologies, and to maintain a list that could be used to exempt small businesses when no suitable tires are available. However, the Panel recognizes the difficulties of maintaining an up-to-date list of certified technologies. The Panel recommends that, if EPA does not adopt the list-based approach, the agency consider a simplified letter-based compliance option that allows manufacturers to petition EPA for an exemption if they are unable to identify tires that meet the LRR performance requirements on a trailer family basis.

Trailers with Unique Use Patterns

The Panel recommends excluding all trailers that spend a significant amount of time in off-road applications. These trailers may not spend much time at highway speeds and aerodynamic devices may interfere with the vehicle's intended purpose. Additionally, tires with lower rolling resistance may not provide the type of traction needed in off-road applications.

General Flexibilities for All Small Trailer Manufacturers

The Panel recognizes that some manufacturers, who have diverse product lines and high sales volumes, may benefit from an emissions averaging, banking and trading (ABT) strategy. However, due to the custom-order nature of the trailer industry, SERs have expressed their concern that ABT may provide an opportunity for historically loyal customers or customers with large fractions of a manufacturer's business to bargain for the portion of a manufacturer's sales that have minimal requirements. Based on the low volume of sales and niche market of many small business trailer manufacturers, small businesses in particular may have little leverage in this situation and risk losing their customers to larger manufacturers who have credits to spare. In addition, the accounting and reporting burdens of ABT may preclude small businesses from participating in the flexibility.

Due to the potential for reducing a small business's competitiveness compared to the larger manufacturers, as well as the ABT record-keeping burden, the Panel recommends EPA consider

small business flexibilities to allow small entities to opt out of ABT without placing themselves at a competitive disadvantage to larger firms that adopt ABT, such as a low volume exemption or requiring only LRR where appropriate. EPA should also consider flexibilities for small businesses that would ease and incentivize their participation in ABT, such as streamlining the tracking requirements for small businesses. In addition, the Panel recommends that EPA request comment on the feasibility and consequences of ABT for the trailer program and additional flexibilities that will promote small business participation.

In addition, for all trailer types that will be included in the proposal, the Panel recommends a 1-year delay in implementation for small trailer manufacturers at the start of the proposed rulemaking to allow them additional lead time to make the proper staffing adjustments and process changes and possibly add new infrastructure to meet these requirements. In the event that EPA is unable to provide pre-approved technologies for manufacturers to choose for compliance, the Panel recommends that EPA provide small business trailer manufacturers an additional 1-year delay for each subsequent increase in stringency. This additional lead time will allow these small businesses to research and market the technologies required by the new standards.

Alternative Fuel Engine Converters

To reduce the compliance burden of small business engine converters who convert engines in previously-certified complete vehicles, the Panel recommends allowing engine compliance to be sufficient for certification. This would mean the converted vehicle would not need to be recertified *as a vehicle*. This flexibility would eliminate the need for these small manufacturers to gather all of the additional component-level information in addition to the engine CO₂ performance necessary to properly certify a vehicle with GEM (e.g., transmission data, aerodynamic performance, tire rolling resistance). In addition, the Panel recommends that small engine converters be able to submit an engineering analysis, in lieu of measurement, to show that their converted engines do not increase N₂O emissions. Many of the small engine converters are converting SI-engines, and the catalysts in these engines are not expected to substantially impact N₂O production. Small engine converters that convert CI-engines could likely certify by ensuring that their controls require changes to the SCR dosing strategies.

Based on the comments received from SERs, the Panel does not recommend separate standards for small business natural gas engine manufacturers. The Panel believes this would discourage entrance into this emerging market by adding unnecessary costs to a technology that has the potential to reduce CO₂ tailpipe emissions. In addition, the Panel believes additional leakage requirements beyond a sealed crankcase for small business natural gas-fueled CI engines and requirements to follow industry standards for leakage could be waived for small businesses with minimal impact on overall GHG emissions.

Finally, the Panel recommends that small engine converters receive a one-year delay in implementation for each increase in stringency throughout the proposed rule. This flexibility will provide small converters additional lead time to obtain the necessary equipment and perform calibration testing if needed.

Vocational Chassis Manufacturers

The Panel recommends interim reduced requirements for these small manufacturers with stringencies that include technologies that fit the applications of these vehicles.

Emergency Vehicles

One of the vocational chassis SERs was a fire truck manufacturer. Fire trucks, and many other emergency vehicles, are built for high level of performance and reliability in severe-duty applications. Some of the CO₂-reducing technologies listed in the materials could compromise the fire truck's ability to perform its duties and many of the other technologies simply provide no benefit in real-world emergency applications. The Panel recommends proposing less stringent standards for emergency vehicle chassis manufactured by small businesses. The Panel believes it is feasible for small manufacturers to install a Phase 2-compliant engine, but recommends EPA request comment on whether the use of LLR tires will provide enough CO₂ benefits to justify requiring small business emergency chassis manufacturers to adopt them. In addition, the Panel recommends a simplified certification approach for small manufacturers who make chassis for emergency vehicles that reduces the number of inputs these manufacturers must obtain for GEM. Emergency vehicles make up less than one percent of the annual vocational vehicles sold, and the Panel anticipates these reduced requirements would have a minimal impact on the overall CO₂ reductions of the program.

Off-Road Vocational Vehicles

EPA is planning to propose to continue the exemptions in Phase 1 for off-road and low-speed vocational vehicles (see generally 76 FR 57175). These provisions currently apply for vehicles that are defined as "motor vehicles" per 40 CFR 85.1703, but may conduct most of their operations off-road. Vehicles qualifying under these provisions must comply with the applicable engine standard, but need not comply with a vehicle-level GHG standard. The Panel believes this exemption is sufficient to cover the small business chassis manufacturers who design chassis for off-road vocational vehicles.

Custom Chassis Manufacturers

The second vocational SER manufactures chassis for specialty operations and that SER has very small annual sales volumes. He provided a summary of his products that indicate his company has a limited ability to adopt many of the technologies described in the materials. The Panel recommends proposing a low volume exemption based on the volume of sales. Similar to the recommendation for emergency vehicle chassis manufacturers, the Panel believes it is feasible to require installation of a Phase 2-compliant engine and recommends that EPA request comment on the benefits of LRR tires in this market segment. At this time, the Panel doesn't have enough information to recommend a sales volume, but recommends that EPA request comment on how to design a small business exemption by means of a volume exemption and what sales volume would be an appropriate threshold.

Glider Manufacturers

The Panel recognizes that EPA would like to reduce the use of glider kits, which have higher emissions of criteria pollutants like NO_x than current engines, and which could have higher GHG emissions than Phase 2 engines. However, the Panel believes that the number of vehicles produced by these small businesses is too small to have a substantial impact on the total heavy-duty inventory. The Panel also believes that there should be an allowance to produce some number of glider kits for legitimate purposes, such as for newer vehicles badly damaged in crashes. The Panel therefore recommends proposing an explicit allowance for existing small businesses to continue assembling glider vehicles without having to comply with the GHG requirements. The Panel recommends that any other limitations on glider production be flexible enough to allow sales levels as high as the peak levels in the 2010-2012 timeframe.

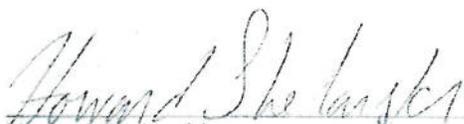
Sincerely,



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JAN 15 2015

Enclosed:
Final Report
List of Materials Shared with SERs
Written Comments Received from SERs