



May 16, 2022

The Honorable Michael S. Regan  
Administrator  
U.S. Environmental Protection Agency  
EPA Docket Center, OAR  
Docket EPA-HQ-OAR-2019-0055  
Mail Code 28221T  
1200 Pennsylvania Ave, NW  
Washington, D.C. 20460

**RE: Docket ID No. EPA-HQ-OAR-2019-0055**

Dear Administrator Regan:

The American Bus Association (ABA) submits the following comments in response to the Environmental Protection Agency's (EPA's) Notice of Proposed Rulemaking: **Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, Docket I No. EPA-HQ-OAR-2019-0055** (Notice), published on March 28, 2022, and accompanying docket materials (the Proposal).

The ABA is a small industry trade association representing, among others, the private motorcoach and motorcoach manufacturing industries. The ABA has represented these industries for over 90 years, in supporting and promoting motorcoach transportation throughout the United States and Canada. Prior to the COVID-19 pandemic, ABA members numbered nearly 3,800, with over 800 motorcoach companies and 6 major motorcoach manufacturer members. The remaining membership is comprised of motorcoach suppliers, and group tour and travel organizations including convention centers and visitors' bureaus along with hotels, restaurants and other travel destination retail. As detailed below, the motorcoach industry was severely affected by the pandemic, causing unprecedented economic fallout for both motorcoach operators and the supporting manufacturing and supply industries. Even today, these industries continue to struggle toward a path of recovery and our comments reflect this situation.

## **INITIAL THOUGHTS**

As a preliminary matter, EPA has not provided sufficient time for the public or stakeholder community to review the Proposal. As ABA is small organization, it has limited resources and this is especially true in the wake of the COVID-19 pandemic. In March 2020 and throughout the period, nearly a quarter of the motorcoach businesses in operation closed, with industry

revenue losses exceeding \$8.4 billion in 2020 alone (<https://home.treasury.gov/news/press-releases/jy0395>). In turn, as the industry representative, ABA has also suffered economic losses and downsized to fit the needs of the industry it serves. ABA's abilities to review the highly complex, technical and lengthy Proposal are severely constrained, particularly given the short amount of time provided for the comment period. Because ABA lacks both in-house technical expertise and the capacity to obtain such assistance in a short time span, it has placed the motorcoach industry at a distinct disadvantage in responding to the Proposal. This benefits neither EPA or the motorcoach industry in terms of meeting the goal to better control air pollution from heavy duty vehicles.

On behalf of the motorcoach industry, ABA, along with many other stakeholders, petitioned EPA for a reasonable extension of time to appropriately review the Proposal, as done on prior occasions with similarly complex rulemakings (EPA-HQ-OAR-2014-082, Sept. 2015; 80 FR 53756). Considering the Notice is 475 pages in length, including various complex tables and formulas, along with a docket of additional supplemental materials ranging in the thousands of pages, it is unrealistic for small stakeholders to properly review and prepare comments in response to the Agency's proposed action. The EPA's grant of a 3-day extension, particularly after being forced to extend the public hearing schedule and conduct additional outreach/briefings, appears misguided, in terms of providing sufficient opportunity for public participation in a significant rulemaking. Proposed rules of this size and scope require, and the public is generally afforded, a minimum of 60 to 120 days to review and formulate comments. It is unfortunate EPA is limiting the process for a rulemaking proposal of this scope as it will result in costly, unintended consequences that will diminish anticipated benefits and hinder future cooperation between the public and private sectors.

We do appreciate the letter sent to ABA from Principal Deputy Assistant Administrator Joseph Goffman regarding our request for an extension of time for the comment period and explaining the Agency's position in denying the request for additional time. We do find it hard to understand how the Agency could consider an issuance of the pre-publication version of the proposal as part of the review timetable, when it is well known that those pre-publication versions can change (and in this case did change, as additional dates were added to the announced public hearing), and in this specific case between March 15 and May 4, nearly 450 new supplementary materials were added to the docket. That is a tremendous amount of material to review, consider and digest in addition to the lengthy proposal. As stated in the response letter, it is very clear that the EPA is committed to their timeline in getting a final rule out before the end of the year, and very few suggestions for modifications to this rule proposal will be evaluated or considered very seriously.

Nonetheless, in the interest of ensuring EPA is aware of the interest, and to the best of our abilities, the concerns of the motorcoach industry in relation to this rulemaking, ABA submits the following comments for the record. Please be advised, however, ABA will file supplementary comments, as appropriate, as we continue to work through the Proposal.

## **I. EPA's Focused on Trucks**

Initially, ABA's overarching concern with the Proposal, and the EPA's review for that matter, is

the apparent lack of understanding of the types of vehicles and industries that use and rely on heavy-duty, compression-ignition engines. Although the Proposal targets engine emissions by way of regulating engine manufacturers, in reality it is the use of these engines on the nation's roadways that affects air quality. In the Executive Summary of the Notice, the *Industry Overview* focuses exclusively on property-carrying vehicles (Notice, Executive Summary Section A. 1.). A further description, and one of the few allusions to passenger transport, occurs in the **Introduction**, where middle weight class heavy-duty vehicles are described as those that tend to be used for municipal work to “transport people ... locally and regionally....” (Notices, Section I. A.) A cursory reading of the lengthy Notice suggests the rulemaking has no bearing on engines or vehicles used by the private passenger-carrying motorcoach industry. Clearly this is not the case, as EPA does review a number of comments from motorcoach operators in discussing the negative impacts of its current inducement policy (See Notice, Section IV. D.). However, the emphasis on trucks or property-carrying vehicles, particularly in terms of data, does raise several questions and concerns about the underlying assumptions and analyses used to support the Proposal.

The private motorcoach industry provides public transportation services in various capacities generally categorized into three major types: scheduled intercity service, commuter service, and charter operations. Intercity bus service is not “regional” transportation. Instead, akin to rail or aviation, intercity scheduled bus operations provide safe, cost-effective transportation travel between cities, states, and rural to urban areas. In many cases, intercity bus transportation serves as the only means to connect to other modes of public transportation. Commuter bus services are used primarily to support access to jobs, providing point to point service on a scheduled basis, and can also include shuttle services to job locations, educational facilities, or intermodal connections. These services are critical in terms of providing necessary transportation in environmentally sensitive urban settings. For example, in the Washington, D.C. metropolitan area alone, motorcoach commuter operations moved over 25,000 passengers a day pre-pandemic ([https://www.mwcog.org/assets/1/28/07122019 - Item 11 - 2018 State of Public Transportation Draft Report.pdf](https://www.mwcog.org/assets/1/28/07122019_-_Item_11_-_2018_State_of_Public_Transportation_Draft_Report.pdf)), providing necessary relief to the congested streets of the national Capitol region. Collectively, intercity and commuter bus operations also serve as a vital transportation link for rural and underserved communities throughout the nation, providing safe and affordable transportation and for some the only transportation option. A third category of motorcoach operations are charter operations. These operations are contracted services that generally do not occur on a scheduled basis. Charter operations range from moving school children on class trips, sports teams and entertainers between venues, and leisure related trips either as stand-alone motorcoach trips or as intermodal ground connection for other modes such as cruises and airlines. Additionally, and notably, charter operations also play a key role in the nation's emergency response planning and defense operations. Charter motorcoaches are a critical component of the national emergency response network used to evacuate citizens in harm's way, such as during hurricanes and wildfires. These vehicles are also used to support emergency response personnel on scene, providing shelter and facilities to conduct operations. The military also relies on motorcoaches to move military personnel and their equipment to training sites and deployments. As well, motorcoach vehicles are a component of strategic defense planning for the national capitol. There are also contract service operations, which typically includes providing exclusive transportation systems for private businesses such as Google or oil fields for example. There are also hop on, hop off slow

moving tour operations. Long distance scheduled airport shuttle transportation is a unique operation, but also can be captured by either charter or intercity metrics (J. Dunham & Associates, “Motorcoach Census”, Jan. 2022).

However, the Proposal does not really address motorcoach operations, or the benefits derived from travel by motorcoach. Because of EPA’s emphasis on trucks or freight carrying services, ABA believes the assumptions and analyses EPA relies upon for support are either inaccurate or incomplete. Passenger carrying transport, and specifically motorcoach operations, differ significantly from freight transport. For example, the impacts on air quality from bus and motorcoach operations should not be solely evaluated in the context of engine emissions but must also take into account the number of the other vehicles removed from the road by virtue of providing mass transportation. Motorcoach operations can take up to 50 personal vehicles off the road (MJ Bradley & Associates (Ed.). (2019, June). *Updated Comparison of Energy Use & Emissions from Different Transportation Modes* - <https://www.buses.org/assets/images/uploads/general/2019%20UPDATE%20Comparative%20Fuel%20CO2%20FINAL-July%202019.pdf>). When you consider the potential removal of 600 million passengers worth of personal vehicles from our roadways, we believe that the motorcoach industry should receive some special considerations under this rulemaking, and should certainly be acknowledged for their positive impact on the environment. It is short-sighted and inaccurate to entirely discount the benefits to air quality from removing other vehicles from the road in terms of both emissions as well as congestion. At the same time, if conducting motorcoach operations becomes cost prohibitive or untenable, it will cause the demise of the motorcoach industry, leading to an increase of vehicles on the road and increased congestion for urban areas, reversing the strides made to limit pollution and improve air quality.

As EPA points out, the Clean Air Act (CAA) framework has provided significant advances in improving air quality, through cleaner burning fuels and emission control standards – and this is not to suggest additional improvements cannot be made. As stated by the Truck and Engine Manufacturers Association (EMA) in 2018, “Over the past 20 years EMA manufacturers have innovated and implemented advanced clean technologies to reduce NOx emissions by over 90% and particulate emissions by over 98%.” But there needs to be a balance, accounting for all of the actual costs and benefits associated with the motorcoach industry and the impact of the emissions control program on these businesses and weighing what is truly feasible and makes sense over a reasonable time horizon. It does not serve to increase the stringency of the emission control standards and testing, if the result is fewer motorcoaches on the road due to an excessive increase in cost to purchase a new vehicle, the weight of the new vehicle exceeding federal limits, or the new emission control system on the engine further degrading the reliability of the vehicle. EPA must consider all heavy-duty vehicles users, including bus and motorcoach operators, and take into account the unique challenges and federal laws beyond the environmental arena, when considering this rule. Further, the proposed rule leaves major open questions about its impact on engine size and weight. Any significant increase in either the size or weight of engines could counter-productively serve to potentially reduce the number of passengers that could be transported on a motorcoach. For example, both under federal and state laws buses are subject to strict weight limits (23 USC 127). However, the proposed rule contains no useful analysis of its bus weight implications. Vehicle redesign costs to accommodate any increased weight to the engine or emissions control system components should have also been considered in the

## Regulatory Impact Analysis.

Further, if the Proposal degrades the motorcoach industry it will have an impact on the economy through job loss, reduced transportation capacity, and the loss of transportation options for the most vulnerable and price-sensitive communities who rely heavily on motorcoach transportation. In addition, the drivers of the motorcoach industry represent a diverse group, providing employment opportunities for underserved communities at rates that exceed the national averages for other industries. Meaning, that the loss of the motorcoach coach industry will lead to increased unemployment for communities of color, as well as women. It is an expressed goal of this Administration (see “**Executive Order on Tackling the Climate Crisis at Home and Abroad,**” January 2022) to create jobs in tackling climate initiatives, not take them away. Despite the driver shortage, over 90,000 motorcoach drivers are currently employed.

The loss of a key transportation option for underserved and price-sensitive communities is also a key concern. The EPA devotes significant attention in the Notice to environmental justice concerns and the need to ensure all communities benefit from air quality improvements. However, the EPA makes no mention of the key role motorcoach services play in meeting the transportation needs of all communities, in particular economically disadvantaged and rural communities. As mentioned, for many of these constituencies, the motorcoach industry is the primary and sometimes the only mode of transportation available. Motorcoach services connect these communities to jobs, education, necessary medical services, and other intermodal transportation services across the country. In FY 2021, the Department of Defense made extensive use of the motorcoach industry, contracting for the motorcoach movements of nearly 28,000,000 military personnel through their military bus program (<https://www.defensetravel.dod.mil/site/bus.cfm>). According to key emergency transportation coordinator Transportation Management Services, they organized over 500 bus movements as part of emergency transportation and evacuation movements during the 2020 hurricane season getting thousands of people out of harm’s way.

The EPA needs to incorporate more data on the motorcoach industry, motorcoach services and the role motorcoaches play in the national transportation system, into its analysis and assumptions for this rulemaking. Motorcoach transportation provides a significant benefit to air quality by removing other vehicles from the road. If motorcoach operations in this country were to decline, it will have a negative impact on air quality, and effect the economy through job loss and by limiting transportation options, particularly for undeserved communities who rely heavily on motorcoach transportation, in addition to the military and emergency response network.

## **II. The Proposal**

In terms of the Proposal, ABA comments are in response to the proposed revisions to the emissions control program outlined in the Notice, and do not address the proposed changes to the Greenhouse Gas Phase 2 program. Specifically, ABA has a number of specific concerns relating to the effect the Proposal will have on feasibility, cost, and operational reliability.

### **a. Feasibility**

As repeated throughout the Notice, EPA must also consider technological feasibility, compliance cost, and lead time, in addition to reducing pollution when establishing or revising standards as part of its statutory mandate. In terms of technological feasibility, based on discussions with engine manufacturers and by reviewing prior submissions to the California Air Resources Board (CARB) Omnibus rulemaking<sup>1</sup>, ABA is concerned about the technological feasibility of the Proposal, particularly with regard to EPA's favored Option 1. The ABA, as representatives of heavy-duty vehicle users and lacking resources to evaluate the technical complexities involved in developing engines and emissions control systems, must rely on the expertise of such manufacturers. Based on the opinions expressed by the engine manufacturing and the vehicle components manufacturing industries, there remain questions as to the feasibility of complying with the proposed revised standards, particularly Option 1's step 2. Although we understand research conducted by the Southwest Research Institute demonstrated promise, in terms of establishing feasibility for the proposed revised standards pursuant to Option 2, we further understand the research was limited and not actually evaluated in terms of an actual vehicle, let alone a fully loaded motorcoach, or other real-world scenario. Based on the lack of consensus of whether the proposed revised emissions standards are technically feasible, ABA believes EPA should reconsider the underlying data and focus on its proposed Option 2. As the vehicle components manufacturing industry noted in their comments to the CARB Omnibus regulation, technologies continue to develop and can be improved as they are implemented. Since the technology evaluated by the Southwest Research Institute has yet to be actually deployed in an actual vehicle, of any sort, it seems premature for EPA, even with its "technology-forcing" authority, to attempt to impose standards beyond MY 2031, per Option 1.

EPA should also consider that by acting prematurely, relying on its "technology-forcing" approach, it may again find itself in the position it is now in, seeking revisions to its 2016 Greenhouse Gas Emissions Phase 2 program. As noted in the Notice, EPA premised the 2016 rule on the unlikelihood of the heavy-duty market becoming electrified in the time frame of the program. However, the Agency's outlook has now apparently changed regarding targeted segments of the heavy-duty market. As technological advancement is sure to occur during the proposed Option 2 timeline, as engine and component manufacturers heavily invest in research and development, ABA believes EPA should not consider imposing standards beyond Option 2.

**If EPA determines to proceed with the Proposal, ABA supports Option 2 only.**

#### **b. Costs**

Although ABA has insufficient time to fully analyze the cost data included in the Proposal to meet the comment deadline, these comments will address cost concerns on a broad basis. From a fundamental standpoint, the Proposal will increase costs significantly for engine manufacturers, and in turn for heavy-duty vehicle users. There will be increased costs associated with research and development necessary to achieve the proposed new standards, costs to produce the new technology, costs to improve the durability of components to meet the proposed extended useful life of the engine and to support the proposed extended warranty time period. These costs will inevitably be passed on to customers, in other words heavy-duty vehicle purchasers. EPA

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<sup>1</sup> "Proposed Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments," California Air Resources Board, Aug. 2020.

suggests these costs will be minor, in terms cost increases, but estimates of the actual costs associated with the Proposal suggest the cost increases for a heavy-duty engine could exceed \$42,000 per vehicle per other commenters such as the Truck & Engine Manufacturers Association.

Additionally, there will also be added costs for vehicle purchasers associated with operating engines with more complex emissions control systems, such as increased maintenance intervals, replacement component products, supply chain issues, and ease in diagnosing and facilitating repair. Although EPA suggests the Proposal would actually lower emission system repair costs, by extending the useful life of the engine and the warranty period, these changes would still come at a cost as engine manufacturers will be taking on more liability – and these costs will be reflected in the purchase price of a new vehicle and some components may end up being in short supply as sensors and chips are currently. Also, EPA makes assumptions on future repair costs in the Notice; however, the motorcoach industry already bears a costly burden under the current heavy-duty emissions regulations as a result of EPA’s inducement policy and design strategy. Perhaps unanticipated in the initial emissions control rulemaking, it is a very real and costly burden to the heavy-duty vehicle industry, and it is not fully addressed in terms of cost analysis in the Proposal, as it will likely increase even with EPA’s proposed inducement provisions. EPA includes discussion of the cost burden in the Notice under Section IV. D, based on comments from the Advanced Notice of Proposed Rulemaking in this proceeding. These comments identify a number of real world, burdensome costs to truck and motorcoach operators, including unnecessary repair expenses for replacing non-faulty parts, towing costs, lost time and schedule impacts, reimbursement costs for passenger tickets, and cost to reputation as a result of inducements or derates. However, above and beyond these costs is the largest cost risk for motorcoach operators: the risk to human life by placing in peril stranded passengers, as a result of this design strategy. ABA cannot sufficiently underscore the hazard created by EPA’s inducement policy and the fear within the industry because of the increased risk of human life caused by the Proposal’s potential to increase derate occurrences.

In addition to the extremely burdensome potential costs associated with the Proposal, both in terms of direct and indirect costs to manufacture and maintain new emissions control technology, which may not even be feasible, the Notice also mentions EPA’s review of the Proposal’s potential impact on the sale of new vehicles and fleet turnover. Here, again, ABA believes EPA’s estimates are insufficient because the underlying cost estimates in the analysis do not fully capture the costs and economic impact on motorcoach operators, or other property-carrying stakeholders. With the potential cost to purchase a new vehicle under the Proposal increasing by \$42,000 or more, along with additional costs associated with maintaining the system, and likelihood of increased repair costs and other operational costs resulting from the likelihood of increased derate situations, motorcoach operators will take every measure possible to avoid the need to purchase a new vehicle for as long as possible. This outcome will not only affect air quality, it will also affect safety, with older vehicles remaining on the road. Alternatively, the cost to purchase a new vehicle will force more motorcoach companies out of business.

As previously noted, the private motorcoach industry suffered consequential economic losses as a result of the COVID-19 pandemic. Motorcoach operations, overall, were running at 5-10% of capacity throughout 2020, and only recovered to about 45-50% in 2021. Many of the

motorcoach operators who survived and continue in operation today were forced to defer payments on their heavy-duty equipment fleets for months. Even now these operators are still trying to recover from the financial hole caused by these deferments. As well, the motorcoach equipment market was flooded with excess equipment from foreclosures and abandonment during this time period, sinking the value of both equipment and businesses overall. Motorcoach manufacturers were particularly hard hit, with so much excess capacity as new motorcoach sales plummeted down from an average of 2,200 units annually (2016-2020) to less than 1,000 in 2021 (<https://www.buses.org/aba-foundation/research-summary/quarterly-sales-data>). The industry is experiencing an unprecedented driver shortage, leaving equipment sitting idle. All to say, the motorcoach industry, economically, remains in an unstable position for the foreseeable future, and equipment costs plays a major role in business decisions.

In addition, one of the major issues that many of the motorcoach fleet operators face is the lack of available diagnostic equipment. For each of the engine manufacturers, different diagnostic licensed software is required, in addition to specialized training. Very few motorcoach fleet operators are going to have many of the computers equipped with the requisite software readily available, particularly with those software licenses retailing in excess of \$20,000 each. With many motorcoach fleets averaging 5-7 operational units, only the largest operators or the manufacturers will even have equipment capable of diagnosing an emissions control system issue, much less potentially resolving one. As a result, many motorcoach operators have to send their vehicles to the motorcoach manufacturers or to the engine manufacturers. If the generic scan tool is going to be as scarcely available or as costly as the currently diagnostic software, those costs will need to be factored into this rulemaking as well as the cost of increased down time. And any cost savings anticipated by offering the generic scan tool option to delay the derate inducement should be reduced by a factor of the availability of that tool.

In sum, ABA believes EPA underestimates the cost impacts of the Proposal, in terms of the cost to manufacture an engine with an emissions control system to meet the proposed standards and testing, along with the added cost to extend the useful life and warranty periods. These costs will lead to an increase in vehicle purchase price and maintenance and repair costs for vehicle purchasers. Further, ABA does not believe EPA properly accounted for the costs associated with its flawed inducement policy and design strategy, even with the Proposal's provisions to address this issue which in many ways seem aspirational. ABA also, again, points out that EPA has not fully accounted for or undervalued the benefits of travel by motorcoach and the importance of encouraging such travel, rather than making motorcoach operations prohibitively and unreasonably expensive, slowing down fleet turnover and making motorcoach operations unviable.

### **c. Safety and Reliability**

Finally, in addition to feasibility and costs, a major concern of the motorcoach industry is engine reliability and EPA's inducement policy. The ABA does not believe EPA sufficiently understands the scope of the problem or adequately addresses the issue in the Proposal, particularly when the proposed new standards and testing cycles have the potential to exacerbate the derate issue.



First and foremost, EPA needs to clearly recognize that their SCR inducement policy is a problem, and not describe it as a “mix of incentives and behaviors.” (Notice, Section IV.D.) It is a serious and costly problem for the motorcoach industry. The EPA inducement policy creates undue safety risks for drivers, passengers and other roadway users. The comments referenced in the Notice repeatedly note that EPA’s inducement policy leads to vehicles, and thus people, stranded or parked along a roadway. This is particularly a hardship and safety hazard for the motorcoach industry. In addition to carrying the precious cargo of human lives, unlike the property carrying industry, the motorcoach industry does not have the same flexibility or accessibility to equipment to easily replace a stranded vehicle or find a service repair station. Further, the timeframes for reacting to and/or resolving a derate situation are unreasonable. Also, in terms of timing, as there is currently a driver shortage in the motorcoach industry, limits on the hours a driver is able to drive coupled with time to address a derate issue, further challenges motorcoach operations in the face of the inducement strategy.

It is also not a problem solely related to the amount or quality of diesel engine fluid or DEF. Engine inducements or derates deriving from DEF-related triggers are problematic; however, as the comments highlight, DEF-related issues are not the only triggers for derates. Derates can occur from software glitches, loose wiring, faulty sensors, cold temperatures and so forth. Also, troubling, is the lack of consistency in inducement design among engine manufacturers. Regardless of whether it be a DEF-related inducement or other trigger outside of the operators’ control, derates are a prevalent and costly occurrence in the motorcoach industry, that raises serious safety and economic concerns. EPA’s inducement policy, ABA believes, again highlights EPA’s lack of understanding of the motorcoach industry, a key stakeholder subject to its emissions control program. Inducements or derates lead to increased safety risks and often unnecessary operating costs, and loss of business credibility and good will. ABA and other motorcoach stakeholders provided survey results to the EPA, featuring the responses of a variety of fleet operators (Dated Oct. 15, 2021) to their experiences with SCR systems and derate conditions. A couple of highlights to note from that survey:

- \* 94.66% have had some kind of emissions-related repair issue.
- \* 92.2% have had an emissions-related issue occur mid-trip.
- \* 94% experienced a forced regeneration. Required with special software not available at most shops.
- \* 72.6% had to tow a bus to a facility as a result of an emissions-related breakdown.
- \* The cost of a tow and related repairs is estimated to average around \$7500-8000 per instance.
- \* 75.8% said that their emissions related breakdown was a result of a faulty sensor.

Unfortunately, when ABA has raised these issues with EPA, the Agency has admitted it has not collected sufficient data on the issue of fleet related reliability issues or equipment availability. Still, EPA has proposed codifying several inducement provisions in the Proposal, in an effort to address concerns raised, while still intending to “appropriately motivate or restrict certain types of human behavior.” ABA believes, in general, several of EPA’s proposed principles make sense, *IF* they are actually put into practice and work and are not simply aspirational. For example, establishing a consistent inducement policy among all engine manufacturers, fundamentally makes sense. Below, ABA provides additional feedback on specific proposed principles/provisions:

i. Different Inducement Schedules and Speeds – ABA believes there is merit in this approach, but has questions as to determining the appropriate category and how it would work in application for motorcoach operations. For example, where would a motorcoach fall, in terms of high-speed and low-speed vehicles? If the vehicle profile changes or fluctuates, does the inducement schedule assessment change for the vehicle? ABA also believes adjusting the derate schedule into a 4-steps along with setting more appropriate maximum and final inducement speeds over the inducement interval has merit; however, ABA has not had sufficient time to review this proposal with motorcoach operators for specific feedback. ABA plans to hold further discussions with motorcoach operators on both the step interval approach and maximum speeds.

ii. Faulty Inducements – Similar to establishing consistent inducement policy among manufacturers, ABA believes stopping inducements from occurring when a fault code is flagged by the system, but the SCR system is still controlling NOx emissions, is a good idea. However, motorcoach operators often experience reliability issues with NOx sensors, which would diminish the value of this proposal. Also, if an engine manufacturer does not have control over third party suppliers for SCR components, such as NOx sensors, ABA questions if this issue can/will be addressed. As well, ABA needs additional time to review the NOx override feature with motorcoach industry members.

iii. Display Requirements – ABA is supportive of the proposed requirement that engine manufacturers display the triggering condition leading to an inducement and a countdown timer to estimate the time or distance till the next inducement stage. This information could be very useful to avoid the stranding of vehicles and passengers. The current display of numeric codes and not necessarily a dash icon light is extremely confusing and not easily discernable to many drivers. However, returning to the inducement schedule, there needs to sufficient time for the motorcoach to reach a safe location. It is not unusual for motorcoach routes to traverse remote stretches of the country. Also, there are not as many service locations available to a motorcoach, as opposed to a truck. In general, though, ABA does believe this is a useful proposal.

iv. Self-Heal and Generic Scan Tools – ABA appreciates EPA’s consideration but needs more time to review this proposal with motorcoach operators. On face value, the proposal appears meritorious, but it also raises a number of questions. Such as who is to provide the generic scan tools and at what cost? Who is expected to use the tools? Motorcoach drivers have an enormous responsibility in operating their vehicle safely and addressing passenger needs. They are not expected to be vehicle technicians. In addition to a driver shortage, as well as a lack of availability or access to the diagnostic software due to cost, there is also a severe technician shortage in the motorcoach industry. Again, this is a distinction of motorcoach operations versus property-carrying operations.

Overall, ABA would prefer to work with EPA further to ensure an adequate body of data is made available to inform development of proposals concerning derates, and believes the Proposal is too rushed. We do see potential value in terms of relief from derate burdens if they work as intended. Yet would like to work with EPA to explore additional relief options such as the

voluntary application of auxiliary emission control device's (AECD) on previous model year engine's dating back to 2008 to help mitigate existing issues with faulty derate inducements. As to the specific questions EPA seeks comment on under the inducement strategy section, Section IV. D., ABA will consider providing additional input through supplemental comments.

### **III. Flexibility - Relief**

In addition to the rushed nature and time constraints for this complex rulemaking, the ABA identified feasibility, cost and reliability concerns the motorcoach industry has with the Proposal. In the interest of facilitating EPA's rulemaking effort, ABA also offers a proposal to alleviate some of the cost and derate concerns identified, while accounting for the environmental benefits provided by the motorcoach industry and promoting motorcoach travel. Akin to emergency vehicles that rely on heavy-duty engines, manufacturers providing heavy-duty engines to the motorcoach industry should be afforded similar regulatory flexibility with regard to inducement strategy. In line with EPA's 2012 relief measures, EPA could expand the application of the AECD as part of the certification process for engines to be used in motorcoach vehicles.

Providing engine manufacturers producing engines for use in motorcoach vehicles with the same flexibility afforded to engines used in emergency situations, would address a number of concerns. First, and foremost, EPA's inducement policy creates a serious risk to life within motorcoach operations. By eliminating the threat of reduced engine performance or derating, particularly for motorcoach drivers who are focused on driving safely and the comfort and care of their passengers, EPA address one of the motorcoach industry's greatest concerns not only with the Proposal but also current emission control requirements. This action would significantly reduce the risk of stranding vehicles and passengers on the road and the stranded vehicle becoming a roadside safety obstacle for other vehicles. Motorcoach operations are heavily dependent on passenger designed and driven schedules. Unlike property, transport of passengers requires providing certain necessities to meet human needs. Along with those motorcoach vehicles serving in an emergency response capacity who are performing work directly related to reducing risk to human life from natural disasters or other emergency situations, motorcoaches should not be subject to artificial inducements that prevent the vehicles from performing as necessary.

Additionally, by providing engine manufacturers with flexibility to apply the approved AECD to motorcoach engines, it would eliminate a substantial amount of cost for motorcoach operators. Motorcoach operators would avoid repair costs associated with faulty triggers or components that result in unnecessary derates. Further, it could also reduce the costs under the Proposal associated with extending the useful life of the engine and warranty, and the durability requirements for components. Indirectly, such action would also eliminate the indirect costs outlined in the comments to the ANPRM, related to towing, reimbursements owed due to not meeting schedules, and cost to reputation. The flexibility would also reduce the number of dashboard distractions for drivers, allowing them to remain focused on safely driving the heavy-duty vehicle. By reducing costs and improving safety, by this proposed action, EPA would

clearly make a statement on the importance of transport by motorcoach and recognize the benefits motorcoach travel brings by taking cars off the road.

Conversely, the risk of motorcoach operators not maintaining necessary quantities or quality DEF in their tanks to ensure the RSC is properly working, is low. Motorcoach equipment is expensive to purchase and maintain; motorcoach operators do not want to risk damage to their engine or loss of warranty coverages by not properly maintaining their equipment. Because operators are solely dependent on the availability of their equipment to operate and generate revenue, there is little incentive for operators to circumvent the engine emissions control system.

## **Conclusion**

The EPA is moving far too quickly with this technically complex rulemaking and ABA again requests the agency extend its comment period deadline to allow for necessary and appropriate input. The Proposal, in its current form, and in particular Option 1, raises several concerns for ABA. Most notably, ABA is concerned about the feasibility, weight, cost and resulting reliability of implementing the proposed stringent emission control standards and testing protocols, along with the extension of the engine useful life and engine manufacturer warranty. If EPA proceeds with the Proposal, ABA strongly advocates for pursuing Option 2, under the proposed standards and test procedures. ABA also notes that EPA could alleviate a number of concerns raised by the motorcoach industry by expanding the Relief Measures provided to engine manufacturers in 2012, that allow for modifications to emission control systems to prevent reducing engine performance, to engines manufactured for use in motorcoaches. Based on EPA's current time schedule for this rulemaking, if no relief from the proposed requirements is provided, EPA does not appear to be interested in ensuring the motorcoach industry remains a viable option of travel. Under the Proposal the motorcoach industry will face increased safety risks and exorbitant increases in costs to operate. In turn, those communities most reliant on motorcoach services, including disadvantaged and rural communities, emergency responders and the military, will all note a reduction in service capacity across the national transportation network. As previously noted, ABA will supplement these comments as appropriate.

ABA would also like to support and concur with all of the other comments submitted to this docket by motorcoach fleet operators and motorcoach manufacturers on behalf of the motorcoach industry.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Brandon Buchanan", with a long horizontal flourish extending to the right.

Brandon Buchanan  
Director of Regulatory Affairs