NGVAMERICA
Natural Gas Vehicles for America

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**May 15, 2017**

Ms. Samantha Davis
Senior Counsel and Associate Administrator for Policy
Regulatory Reform Officer for Executive Order 13777
1200 Pennsylvania Avenue, NW
Washington, DC 20460

**Re: Identification of Regulations for Repeal, Modification or Replacement Under Executive Order 13777, 82 Fed. Reg. 17793 (April 13, 2017) (EPA Request for Comment) - Docket No. EPA-HQ-OA-2017-0190**

Dear Ms. Davis:

NGVAmerica appreciates the opportunity to provide comments on the U.S. Environmental Protection Agency's regulatory review effort announced on April 13, 2017.

NGVAmerica is a national trade association dedicated to creating a profitable, sustainable and growing market for compressed natural gas, liquefied natural gas, and renewable natural gas powered vehicles. NGVAmerica represents more than 200 companies, including vehicle manufacturers; natural gas vehicle component manufacturers; natural gas distribution, transmission, and production companies; natural gas development organizations; non-profit advocacy organizations; state and local government agencies; and fleet operators.

The United States is the world's largest producer of clean-burning natural gas. The abundance of this domestic resource means that it is a clean, low-cost, stable energy source that can secure America's energy needs for decades to come. Using more domestic natural gas results in expanded job opportunities for workers that produce this fuel and it also provides cost-savings for the consumers and businesses that consume this fuel. It also adds much needed revenue to the state budgets in areas of the country where natural gas is produced.

To expand the opportunities for using this domestic fuel here in the U.S., more should be done to ensure that the right types of incentives and common sense regulations govern its use in the transportation sector. Using compressed natural gas (CNG), liquefied natural gas (LNG), and renewable natural gas (RNG) in transportation can displace demand for imported energy and deliver the lowest emissions among all fuels.

NGVAmerica offers the following comments relating to the regulation of natural gas vehicles. The requested regulatory and policy changes are intended to remove unnecessary impediments to the increased use of natural gas vehicles and domestic natural gas resources and, if adopted, will promote job creation, clean air, reduced emissions of greenhouse gases, and improved energy security.

## I. Amend the Driving Range Requirements for NGVs to provide fair treatment relative to other technologies, and to provide additional incentive for manufacturers to produce natural gas vehicles

EPA should remove the requirements in 40 CFR § 600.510–12, *Calculation of average fuel economy and average carbon-related exhaust emissions*, part (c)(2)(vii)(B) for fuel economy and (j)(2)(vii)(B) for emissions, that require NGVs to have a driving range on natural gas that is two times the driving range on gasoline or diesel fuel. This requirement is wholly impractical as it would require automakers to install significantly larger and more expensive natural gas fuel systems on dual-fuel vehicles, or alternatively require automobile manufacturers to reduce the size of gasoline fuel systems installed on dual-fuel NGVs, to access the utility factors available to other vehicles. This latter requirement would impose significant costs as it would require the design and manufacturer of smaller gasoline tanks and changes in the assembly production of base gasoline vehicles to fit vehicles with unique gasoline tanks.

NGVAmerica previously petitioned EPA to remove this requirement but to date EPA has not acted on this petition. We would again urge EPA to revisit this issue and amend its regulations accordingly by removing this burdensome and unnecessary requirement. Amending the rules as requested would level the playing field with other technologies and increase the incentive for manufacturers to offer more light duty NGVs. It also could be expected to encourage manufacturers to begin to commercial new low-pressure and absorbed natural gas systems.

NGVAmerica wishes to indicate its support for separate comments submitted by VNG.CO addressing this same issue, and would appreciate an opportunity to provide additional information in support of this request.

## II. Amend the marine engine certification requirements for dual-fuel natural gas engines so that compliance is based on the intended use of these engines and recognizes that when operating on natural gas/diesel mixtures these engines comply with and exceed the Tier III requirements. 40 CFR Part 1042 – Control of Emissions from New and In-Use Marine Compression-Ignition Engines and Vessels.

Natural gas, including liquefied natural gas, holds significant potential to displace petroleum as marine fuel and reduce emissions of harmful pollutants. Today, there are over 200 LNG ships in operation and on order. About 15 percent of new orders for these ships will operate in the US waters. There is growing interest in using LNG because it is a virtually sulfur free fuel and offers a significant reduction in particulates and NOx emissions compared to conventional marine fuels. LNG also provides a reduction in greenhouse gas emissions. In addition to the environmental benefits, encouraging the use

of more LNG as a fuel for marine vessels will lead to new economic development as bunkering facilities, ships and other fueling infrastructure are built to support this market.

In the US, Tier III NOx requirements are in effect for all category 3 new built vessels (range in size from 2,500 to 70,000 kW (3,000 to 100,000 hp) – large engines that propel ocean-going vessels such as container ships, oil tankers, bulk carriers, and cruise ships). The more demanding NOx emission levels required by the Tier III regulation is readily met by ships when they operate on LNG. In fact, using LNG results in NOx emissions that are well below required levels. To use LNG, most marine vessels rely on dual-fuel operation, which here refers to operation on a mixture of LNG and diesel fuel in a diesel cycle or compression-ignition engine.

The problem today is that the Tier III emission regulations do not distinguish between fuel types, or provide any allowance for dual-fuel engines that operate on mixture of LNG and diesel fuel. The regulations therefore require that these vessels meet the NOx emission levels on both fuels including when operating on 100 percent diesel fuel even though that is not how the dual-fuel engines are intended to operate. The result is that manufacturers must equip their dual-fuel natural gas/diesel engines with expensive after-treatment equipment (Selective Catalyst Reduction – SCR – Technology) that is not necessary to achieve the required emission levels. Installing SCR systems on these vessels adds an additional cost of 1 - 2 million dollars per ship, even for ships utilizing diesel only for ignition purposes and whose fuel use is primarily LNG.

While the number of LNG powered vessels is growing, economies of scale are not yet reached, and the expertise and knowledge in building these ships is still fledgling, especially in the US/Jones Act vessels. The fact that ship builders must install costly SCR systems can and does discourage the development of the market for LNG ships and the use of natural gas in the marine market.

NGVAmerica requests that EPA amend it rules to allow a waiver for dual-fuel engines that operate the majority of the time on LNG and that have demonstrated through testing that they meet the Tier III NOx regulation when operating as intended (e.g., 70%NG/30% diesel or 90%NG/10% diesel). Providing this waiver will stimulate growth and jobs in shipbuilding in the US and encourage a faster paced adoption of cleaner-burning natural gas in this market.

## III. Amend the DERA Program to remove scrappage requirement for replacement vehicles that exceed current federal standards by 50% or more for NOx emissions

This issue concerns EPA guidance for the Diesel Emission Reduction Act (DERA) Program. Current guidance provides additional funding (i.e. 35% instead of 25%) for the cost of new replacement vehicles that have been certified to optional low-NOx standards. Thus, the program provides a larger incentive for cleaner engines. NGVAmerica strongly supports this provision as it currently stands but also urges EPA to expand the incentive for low-NOx engines by providing a larger incentive, or by removing the scrappage requirement.

The DERA program seeks to ensure emission reductions by removing older, dirtier equipment from operation. The removal of more polluting equipment is ensured by requiring scrappage of vehicles and engines. Assuming equipment is retired earlier than it otherwise would be the case, this essentially locks in excess emission reductions. Scrappage however comes at a cost for businesses that lose the opportunity to sell their equipment and receive compensation for the remaining value. For new diesel vehicles, it can be argued that providing 25 percent incentive for the cost of new replacement vehicle is more than sufficient to offset the economic loss associated with scrappage, and still provide an incentive to encourage the purchase of new, cleaner vehicles.

For natural gas vehicles, however, the DERA incentive of 25 percent or even 35 percent for the cost of a new vehicle is not sufficient to cover the economic loss associated with scrappage and the added costs associated with new natural gas trucks, which, like other advanced technology vehicles, cost more than conventionally fueled diesel vehicles. To remedy this situation, we would urge EPA to consider providing an even larger incentive for natural gas low-NOx vehicles. This could include providing 50 percent of the purchase for low-NOx alternative fuel trucks, or removing the scrappage requirement for low-NOx trucks. Such a policy would align with the DERA intent by delivering additional emission reductions because low-NOx engines are 50 – 90 percent cleaner than required.

## IV. Amend the testing and sampling requirements for cellulosic fuel produced in anaerobic digesters to be less burdensome and encourage increased production of qualifying cellulosic fuel

Renewable natural gas produced from a variety of feedstocks has proved to be a huge success story, and today accounts for a significant portion of natural gas used to fuel natural gas vehicles. This clean-burning, low-carbon fuel accounts for more than 20 percent of all on-road natural gas demand and is expected to account for more than 40 percent of on-road demand by 2018. The success of renewable natural gas is due in no small part to the inclusion of various incentives and regulatory programs that encourage the production of this fuel including the U.S. EPA's Renewable Fuel Standard (RFS) Program.

To expand the opportunity for renewable natural gas and remove burden on industry, NGVAmerica requests that EPA address the sampling and testing requirements required for anaerobic digesters (AD) that process crop waste to produce cellulosic fuel. AD producers have indicated that the testing requirements to demonstrate that 75 percent of the feedstock used in these facilities is cellulosic based are too burdensome and therefore discourage the production of more cellulosic qualifying fuel. Specifically, we request a change in the testing requirements found in 40 CFR 80.1426 so that instead of requiring the testing of every truck load that is delivered to an AD facility, that the testing is instead done quarterly and on random samples.

**Conclusion**

NGVAmerica appreciates the opportunity to provides these comments and would welcome the opportunity to discuss these issues further with EPA as it moves forward with its regulatory review. In addition to the comments offered here, NGVAmerica would like to offer its support for the comments submitted in the docket by VNG.CO, which address several other issues related to the certification of light duty vehicles that are not included in our submission but nevertheless we strongly support. We believe that the changes requested will provide more fair treatment for NGVs and level of the playing field with other transportation technologies, and thereby increase the use of domestic natural gas as a transportation fuel.

Sincerely,