

July 23, 2010

**U.S. Environmental Protection Agency  
EPA Docket Center (EPA/DC)  
Air & Radiation Docket  
Mail Code 2822T  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460**

**RE: Clean Alternative Fuel Vehicle and Engine Conversions, Notice of  
Proposed Rulemaking, 75 Fed. Reg. 29,606 (May 26, 2010)**

### **Introduction**

NGVAmerica is a national organization dedicated to the development of a growing and sustainable market for vehicles powered by natural gas, biomethane and natural gas-derived hydrogen. NGVAmerica represents more than 130 member companies, including: vehicle manufacturers; natural gas vehicle (NGV) component manufacturers; natural gas distribution, transmission, and production companies; natural gas development organizations; environmental and non-profit advocacy organizations; state and local government agencies; and fleet operators.

NGVAmerica provided a statement at EPA's June 23 hearing in Ann Arbor. The comments provide here supplement our earlier statement. We support EPA's proposed rulemaking because it includes appropriate safeguards to ensure emissions integrity while at the same time providing much needed flexibility. As we stated before, EPA's proposal to streamline the process for certifying natural gas vehicle aftermarket conversions is one of the most important steps the government can take to expand the use of non-petroleum fuels. Increasing the use of natural gas as a transportation fuel plays an important role in increasing energy security, creating jobs, providing cleaner air, and reducing greenhouse gas emissions while generating economic benefits for consumers.

We offer the following additional comments with respect to EPA's notice of proposed rulemaking.

## **Good Engineering Judgment**

We support EPA's requirement that manufacturers seeking certification or approval of conversion systems demonstrate use of "good engineering judgment." However, we believe that demonstrations or statements regarding good engineering judgment also should include evidence indicating that a system will continue to maintain appropriate emission performance over its life, or, stated differently, that such systems and the strategies employed are durable. This is especially important with respect to alternative fuel systems that have been certified or approved using assigned deterioration factors. Manufacturers employing assigned deterioration factors provided by EPA should also provide a statement confirming the durability of their systems and explain why they believe their system will not harm the emissions control system or degrade emissions.

## **Model Year & Certificates of Conformity**

NGVAmerica recommends that the EPA define the "model year" period differently with respect to manufacturers of systems intended to be installed on "used" vehicles or engines. The Clean Air Act definition of "model year" found in section 202,<sup>1</sup> which governs new motor vehicles and manufacturers of new motor vehicles not to used motor vehicles. The definition limits the model year for new motor vehicles to a period that includes only one January 1. This limitation serves to prevent manufacturers of new vehicles from manufacturing and selling vehicles in future years while claiming they are earlier model year vehicles subject to less stringent emission standards. The Clean Air Act in section 203 also requires that new motor vehicles must be covered by a certificate of conformity. EPA regulations have construed these provisions to limit the duration of certificates of conformity for new motor vehicles to only one model year.

The definition of new vehicle is found in section 216 of the Clean Air. It covers vehicles for which the title has not been transferred to the ultimate purchaser. The rulemaking at hand only deals with conversions, i.e. modifications to existing in-use vehicles, not new vehicles. EPA, therefore, is free to establish a different definition of model year and a different time frame for the certificates of conformity issued to manufacturers of systems intended for use on used and in-use vehicles or engines. *Therefore, NGVAmerica recommends that the model year (MY) on the certificate of conformity should be the year in which certification is granted and the certificate should not expire.* Since the emission requirements imposed on a conversion system relates back to the model year in which the engine or vehicle was originally certified and not the year in which conversion system was

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<sup>1</sup> "The term "model year" with reference to any specific calendar year means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year."

manufactured or installed, there is no reason exists to arbitrarily limit the duration of a certificate of conformity issued to an aftermarket conversion manufacturer.

In order to implement the recommendation discussed here, EPA should modify its proposal for new, intermediate age and beyond useful life vehicles by including all three categories under the certification process. The change would mean that there would now be separate subcategories for aftermarket conversions under the certification regulations: (1) new vehicles of less than 2 years old; (2) intermediate age vehicles/engines that are more than 2 years old, and (3) beyond useful life vehicles/engines. There would be no need for the separate “approval process” contemplated in EPA proposal. Consistent with EPA’s proposal, certification fees should be imposed only on the first category of vehicles above (new vehicles of less than 2 years old).

A key reason for the above recommendations is the fact that most state and federal incentives for alternative fuel vehicles require that the vehicle is certified. While the approval process proposed by EPA has a lot of advantages, a key disadvantage is the fact that “approved” vehicles likely would not qualify for federal or state tax incentives or even grant programs. It would take years and a lot of effort to modify all of these different incentives in order to accommodate “approved vehicles.” A more efficient approach to ensuring that these vehicles continue to qualify for incentives is to incorporate the proposed changes under the certification program instead of creating a separate approval process for intermediate and beyond-useful life vehicles.

### **“New” Vehicles**

We support the proposed streamlining procedures proposed for relatively new vehicles, i.e., less than 2 years old. It appears that the proposed regulations for new vehicles largely adopt procedures already allowed under EPA guidance. Including these procedures in the regulations provides greater certainty concerning the continued ability to use such procedures and we, therefore, support EPA decision to codify the procedures.

However, we believe that the current proposal to define new vehicles as those that are 2 years or less is unnecessarily restrictive. The preamble indicates that one of the reasons for retaining the certification procedures largely intact for 2-year old or less vehicles is to “eliminate any perceived incentive that might otherwise exist for OEMs to circumvent certifying original-configuration alternative fuel vehicles/engines, by instead converting already-certified traditional fuel configurations to operate on an alternative fuel.” This concern, however, is unfounded. OEMs are in the business of selling new motor vehicles (i.e., untitled vehicles). That is their top priority. The interest of OEMs in aftermarket conversions is limited to facilitating the conversion

of very low-mileage, recently acquired vehicles by other entities. Moreover, most conversion manufacturers to date have chosen not to pursue vehicles that are more than 1 year old. The preamble to the proposed rule indicates that in 2009 of the 60 certificates awarded to alternative fuel conversions, only two were based on vehicles that were more than one year old. Thus, the proposal concerning “new” vehicles could reasonably be scaled back to only include vehicles from the current model year and vehicles or engines that are 1 year old or less in age without creating any incentive that would potentially discourage OEMs from offering new, OEM-certified alternative fuel vehicles.

We also believe that additional flexibility to certify multiple engine families or test groups is warranted if certain conditions are met. We believe that EPA should develop procedures allowing manufacturers to combine test groups of vehicles manufactured by different original equipment manufacturers. United Nations’ regulations for gaseous fueled vehicles currently allow country’s to adopt such procedures.<sup>2</sup> We believe that this type of certification may not be appropriate for all conversion systems manufacturers but rather it would depend on the type of strategies they employ for converting vehicles. We believe that each manufacturer should be given the opportunity to demonstrate that they can successfully employ strategies that allows them to combine test groups or engine families in this manner.

### **Certification Fees**

In addition to waiving certification fees for vehicles that are older than 2-years (or possibly 1 year or older as proposed above), we would urge EPA to modify the certification fees currently charged in order to allow aftermarket manufacturers to pay these fees at the back-end instead of upfront. Currently manufacturers must pay fees upfront based on *expected* sales. If these sales do not materialize they can request a refund. The requirement to submit fees and then later request a refund ties up valuable funds – funds that most small manufacturers cannot afford to have tied up. We, therefore, propose that EPA adopt procedures to allow manufacturers the option of paying fees at the end of each quarter or annually based on the total number of vehicles actually sold under a certificate. Another approach would be to only require payment of an initial fee of \$750 at the time an application is submitted and allow the manufacturer to pay any additional fees quarterly or annually based on sales that have occurred.

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<sup>2</sup> United Nations Agreement – Regulation No. 115 concerning uniform standards for the approval of compressed natural gas and liquefied petroleum gas systems for motor vehicles.  
<http://www.unece.org/trans/main/wp29/wp29regs/r115e.pdf>

## **Approval Process for Intermediate Age Vehicles**

We support the additional flexibility for intermediate aged vehicles that has been proposed by EPA. As noted above, we believe that intermediate age and beyond useful life vehicles should be certified and should receive certificates of conformity. We also believe that intermediate age vehicles should be defined as those that are more than 1 year old instead of 2 years old.

As currently proposed, the approval process for intermediate age vehicles could be very useful because it allows a manufacturer to gain EPA approval without having to come back each year to gain continued approval. (The changes we have suggested above with respect to the model year definition and the duration of certificates of conformity would provide the same flexibility). We believe that the proposed flexibility provided for intermediate age vehicles/engines will encourage many new businesses to offer alternative fuel conversion systems. The additional flexibility offered for such systems and the fact that EPA is waiving fees for such systems could potentially be an incentive for businesses to pursue conversion systems for older in-use vehicles. Existing conversion manufacturers mostly target relatively new vehicles, but the new procedures for intermediate age vehicle/engines could change that. The same would hold true, however, if EPA adopts the recommendations we have made and incorporates the additional flexibility proposed for intermediate aged vehicles as part of its certification regulations.

## **Mixed-fueled vehicles**

Manufacturers of mixed-fueled vehicles that make no changes to the diesel operation of the vehicle/engine and that do not make any changes to the operation when using a mixture of diesel and natural gas have argued that they should be provided with additional flexibility to convert such vehicles/engines. Given the non-intrusive nature of such systems and the continued reliance on the underlying diesel systems, we believe that such conversions should be afforded additional flexibility. As such, manufacturers of conversion systems for heavy-duty vehicles/engines, in addition to using bench tests to demonstrate emissions compliance, should be allowed to use chassis testing. These procedures should be outlined and approved by EPA and include appropriate stressing and loading of vehicles in order to simulate real-world driving conditions. An appropriately crafted testing program that includes proper loading of test vehicle, selection of worst case engines/vehicles and before-and-after test results should assure EPA that converted vehicles will not increase in-use emissions.

## **US06 Testing**

EPA has asked whether it should require alternative fuel vehicle conversions to conduct emissions testing using the US06 procedures. As EPA has noted, the US06 procedures are currently not required for OEM alternative fuel vehicles. We do not believe it is appropriate for EPA to impose a requirement for aftermarket manufacturers that is more onerous than that required for OEMs.

## **Beyond useful life vehicles**

EPA has proposed three different options for manufacturers of systems intended for use on vehicles or engines that are beyond their useful life. Option 1 requires a detailed description of the conversion system with sufficient technical detail to allow EPA to determine whether the system is appropriate for its intended application. This would include a discussion of the durability of the components used, among other things. Option 2 would similarly require a detailed technical description of the conversion system but would also require before-and-after tests demonstrating that emissions are not increased by the use of the conversion system. Option 3 would require a detailed technical discussion and also would require a report containing OBD checks performed post-conversion. The proposed rule states that EPA intends to finalize only one pathway for approval of such systems.

We believe that all those pathways that have merit, and only those that have merit, should be adopted by EPA. As currently proposed, we do not believe Option 1 has merit. Options 2 & 3 do have merit and we support them. We have not developed a position on whether vehicles or engines that are outside of their useful life only because of mileage should only have the option of pursuing Option 2 above. However, the fact that EPA is even considering such a requirement highlights the potential that the final rule could approve two separate pathways for beyond useful life vehicles and engines even though EPA has indicated that it only intends to finalize one option. As noted above, we do not believe it is appropriate to select only one option if other options truly have merit. We, therefore, support retaining options 2 & 3 in the final rule.

## **Warranty issues**

EPA's final rule should provide additional guidance concerning warranty liability. The current preamble in the proposed rule states that the "conversion manufacturer would normally be held accountable for fixing problems that occur as the result of conversion, while the OEM would generally retain responsibility for the performance of any parts or systems that retain their original function following conversion and are

unaffected by the conversion.” The current preamble is helpful, but we would like the final rule to unequivocally state that simply converting a vehicle does not void the original OEM warranty.

### **OBD Submissions**

The preamble states that an application for certification or approval “must contain any applicable statements of compliance or attestations and an OBD approval letter from the California Air Resources Board or an EPA OBD approval letter if the vehicle will be sold only in States which have not adopted the California emissions standards.” This statement appears to give CARB approval too much weight. We believe that the statement should instead require “an EPA OBD approval letter or a CARB OBD approval letter if the conversion systems will be sold in California or a state that only accepts CARB aftermarket conversions.” Many states have adopted CARB requirements for new vehicles but only a few have adopted CARB requirements for aftermarket conversion systems.

### **Vehicle Identification Numbers (VINs) & End of Year Reporting**

NGV America supports requiring converters to submit VIN tracking information to EPA. We also support EPA making VIN and annual sales information available to the public. The discussion of this issue in the notice of proposed rulemaking alternatively refers to conversion system manufacturers and then converters. With respect to VIN numbers, we believe it would be helpful to make this information available to authorities to assist in identifying alternative fuel vehicles. The final rule should clearly identify whether the obligation to report VIN information and sales falls on the conversion system manufacturer or converter since these entities in most cases are not the same. We believe that converters (the businesses that install conversion systems) are actually in the best position to provide accurate VIN information. We also agree with concerns that have been raised with regard to the misuse of such data or unintended consequences. For example, some states may use the information to determine whether conversions are legal. If the data collected by EPA is not updated regularly and provided in a timely fashion to state authorities this could result in state authorities taking inappropriate actions against vehicle owners.

We also believe that a summary report of total sales by alternative fuel type and possibly vehicles types (i.e., compact, passenger car, light duty truck, etc.) should be provided to help industry better assess market growth and impact of aftermarket conversions.

## **California Air Resources Board (CARB) Regulations & Aftermarket Systems**

We request that EPA provide clear guidance regarding the legality of converting vehicles in states that have adopted the CARB regulations. Our industry supports the continued ability to convert vehicles in such states using EPA-approved systems as long as the vehicle to be converted is a 49-state or 50-state vehicle and the state at issue has not specifically adopted California regulations for aftermarket conversions. We believe this is legally correct. However, it would be very helpful to have EPA publicly state that this is correct.

## **Aftermarket Labeling Requirements**

We support retaining the current label requirements for aftermarket conversion system manufacturers without additional modifications. EPA regulations in 40 CFR §85.505 include the following requirements for converted vehicles:

- (d) The supplemental label shall show the vehicle model year; the aftermarket conversion certifier's name, address and telephone number; the installer's **name**, address, and telephone number; the **date** on which the aftermarket conversion system was installed; the **mileage** of the vehicle at the time of the conversion; and shall state that the converted vehicle complies with federal emission requirements.
- (e) The supplemental label shall list any original parts that were removed during installation of the aftermarket conversion system, as well as any changes in tune-up specifications required for the aftermarket conversion system.

We do not support additional mandatory labeling requirements because they would unnecessarily impose additional cost without sufficient benefit.

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