



Natural Gas Vehicles for America

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December 29, 2017

Director Jim Macy  
Department of Environmental Quality  
1200 "N" Street, Suite 400  
P.O. Box 98922  
Lincoln, Nebraska 68509

**RE: NGVAmerica Comments on the State of Nebraska Proposed VW Environmental Mitigation Plan**

Dear Director Macy:

Natural Gas Vehicles for America (NGVAmerica), the national trade association for the natural gas vehicle industry, respectfully submits the following comments on the State of Nebraska (NE) Department of Environmental Quality's Proposed Volkswagen (VW) Beneficiary Mitigation Plan (Plan). These comments are in addition to the NGVAmerica comments submitted to you on April 21, 2017 (attached) regarding NGVAmerica's recommendations on how states can best use the Environmental Mitigation Trust (EMT or Trust) funds that each state will receive as part of the Volkswagen (VW) diesel emission settlement, and NGVAmerica's comments on the NE VW Draft Plan Request for Comment provided online in November.

Nebraska has a significant opportunity to use the VW Trust funds (\$12.25 million) to positively impact the future of its emissions from on-road and non-road vehicles. The proposed NE VW Plan aligns well with the goals outlined by the U.S. Department of Justice for the EMT. As Stated in the NE VW Environmental Trust Beneficiary Mitigation Plan, "Nebraska's overall goal is to achieve significant, sustainable, and cost-effective reductions in NOx emissions to improve air quality in the state. Other goals of the plan include:

- Achieving reductions in diesel engine emissions especially in areas of the state that bear an undue share of the impact of NOx emissions, while also providing funding for emission reduction projects in other areas of the state;
- Achieving reductions in ground level ozone, for which NOx is a precursor, and which occurs in some areas of the state at levels approaching those that would violate federal ambient air quality standards;
- Providing project funding to both public and private entities;
- Spurring investment in cleaner alternative-fuel vehicles and infrastructure;
- Supporting long-term investments in the zero-emission transportation sector in Nebraska."

In support of the State's overall goal stated above, NGVAmerica strongly encourages the Department of Environmental Quality to prioritize investments in natural gas zero emission equivalent (near zero) emission vehicles since these vehicles are now commercially available in all the desired vehicle categories stated in the Plan, and can begin improving Nebraska's air quality immediately at a much lower cost than other clean technologies (please refer to NGVAmerica's April 21, 2017 Comment Letter for additional information).

Additional comments based on NGVAmerica research and analysis follow.

### **Current State Beneficiary Mitigation Plans**

Sixteen states have released draft VW Mitigation Plans and NGVAmerica has reviewed these plans and offered comments to the states. NGVAmerica believes the Colorado Plan provides an excellent model for other states that wish to segment their funding, maximize the use of alternative fuels, and provide parity among alternative fuels ([https://www.colorado.gov/pacific/sites/default/files/AP\\_VW\\_Beneficiary\\_Mitigation\\_Plan.pdf](https://www.colorado.gov/pacific/sites/default/files/AP_VW_Beneficiary_Mitigation_Plan.pdf)).

NGVAmerica suggests that the current percentages proposed in the school bus section of the NE plan (page 7) should show a greater percentage for CNG school buses (or a lesser percent for diesel buses) to truly reflect current vehicle price differentials and to support the goal above for "spurring investment in cleaner alternative-fuel vehicles and infrastructure."

In the section "Eligible Actions Based on Demand (25%)," NGVAmerica recommends following the **alternative** fuel vehicle options allowed in the Transit and School bus sections of the NE Plan. The State could follow Colorado's example for small Class 8 truck fleets (9 trucks or fewer) which allows new diesel for those fleets due to the budget considerations of small firms.

Regarding Nebraska's plans for funding in the DERA section, NGVAmerica suggests that a third project involving natural gas locomotives since diesel locomotives provide 38% of Nebraska's NOx emissions (Figure C-3, page C-3), and there are proven technologies to run locomotives on liquefied natural gas (LNG). There would need to be a significant match by industry, but this is an area of need that Nebraska should consider supporting.

### **Additional Options for Vehicle Scrappage**

NGVAmerica also recommends that the NE Department of Environmental Quality consider the following vehicle scrappage options in the Plan:

- Increase the options for scrappage beyond a strict replacement of a current fleet vehicle (allow another fleet to provide a vehicle for scrappage; purchase a vehicle for scrappage; etc.)
- Since the Trust does not specify the fuel of the scrappage vehicle, allow natural gas vehicles that meet the year criteria to be scrapped and replaced with new NGVs

## Use the Most Current Emissions and Cost Benefit Calculation Tools

Nebraska's VW Plan uses the EPA Diesel Emissions Quantifier for its calculations of emissions for Table 5 (page 13). While this tool has been used extensively for emissions calculations, the calculations are not based on current data for most vehicle types.

The Argonne National Laboratory's AFLEET tool should be used to calculate vehicle / fuel type emissions since this tool has recently been updated to include current data on all vehicles and fuels including in-use emissions data. The AFLEET Tool 2017 updates include:

- Added low-NOx engine option for CNG and LNG heavy-duty vehicles
- Added diesel in-use emissions multiplier sensitivity case
- Added Idle Reduction Calculator to estimate the idling petroleum use, emissions, and costs for light-duty and heavy-duty vehicles
- Added well-to-pump air pollutants and vehicle cycle petroleum use, GHGs, and air pollutants
- Added more renewable fuel options
- [AFLEET Tool Version History.pdf](#) AFLEET Tool spreadsheet and user manual at: [http://greet.es.anl.gov/afleet\\_tool](http://greet.es.anl.gov/afleet_tool) and tool link is: <http://www.afdc.energy.gov/tools>

## Summary of NGV America's Recommendations for EMT Funding

- ✓ Given that the EMT was created because of NOx pollution associated with non-compliant diesel vehicles, we believe that the funding should be set aside for clean, **alternative fuel vehicle projects that focus on maximizing NOx reduction for the funds spent**
- ✓ Provide a larger incentive and greater overall funding for medium- and heavy-duty engines that deliver **greater NOx reductions than currently required** for new vehicles and engines
- ✓ Target funding for technologies that have demonstrated the ability to deliver actual **lower in-use emissions** when operated in real-world conditions
- ✓ Provide the **highest level of funding to applications that produce the largest share of NOx emissions** (in most regions this means prioritizing for short-haul, regional-haul and refuse trucks)
- ✓ Prioritize funding for **commercially available products that are ready for use**
- ✓ Prioritize funding for **clean vehicles rather than fueling infrastructure**
- ✓ **Scale funding to incentivize the cleanest engines available** – at a minimum, provide parity among alternative fuels by following a version of the Colorado VW Plan that funds non-diesel alternative vehicles in the private sector at 25% of the cost of the vehicle and public sector vehicles at 40%
- ✓ Ensure that funding incentivizes adoption by **both public and private fleets**

- ✓ Prioritize projects that include **partnerships that provide a match** such as a CNG or LNG station being built in locations that will receive the VW funding
- ✓ **Accelerate the funding** in the early years to maximize the NOx reduction benefits
- ✓ Use vehicles emissions measurement tools that reflect current technologies and performance under real world operation duty cycles – **Argonne National Laboratory's AFLEET tool** is the most current

NGVAmerica and its members are eager to serve as a resource to assist the Nebraska Department of Environmental Quality in its further evaluation and development of the state's proposed Beneficiary Mitigation Plan. We strongly encourage the state to recognize the unmatched role that natural gas vehicles can play in delivering NOx emissions reductions required by the settlement and Trust.

NGVAmerica welcomes the opportunity to meet with you to provide further information and analysis on the economic and environmental benefits of natural gas vehicles in Nebraska. Please contact Jeff Clarke, NGVAmerica General Counsel & Director of Regulatory Affairs at 202.824.7364 or [jclarke@NGVAmerica.org](mailto:jclarke@NGVAmerica.org), or me at 303.883.5121 or [smerrow@NGVAmerica.org](mailto:smerrow@NGVAmerica.org) to set up a meeting and for additional information.

Sincerely,



Daniel J. Gage

President, NGVAmerica