



April 2, 2018

Ms. Paula Wilson  
Idaho Department of Environmental Quality  
1410 N. Hilton  
Boise, ID 83706

**RE: NGVAmerica Comments on the State of Idaho Volkswagen Settlement Beneficiary Mitigation Plan**

Dear Ms. Wilson:

Natural Gas Vehicles for America (NGVAmerica) respectfully submits the following additional comments on how the Idaho Department of Environmental Quality (DEQ) can best use the Environmental Mitigation Trust (EMT or Trust) funds (\$17.35 million) that the state will receive as part of the Volkswagen (VW) diesel emission settlement.

NGVAmerica agrees that barring special circumstances, the priority should be on funding projects that deliver greatest NOx reductions for the least cost, as Idaho shows in its evaluation criteria for VW projects. Consistent with this principle, the Idaho DEQ should find that projects involving on- and off-road medium- and heavy-duty natural gas vehicles (both CNG and LNG) are proven to reduce more NOx than their diesel counterparts (see attached NGVA VW Flyer), while not requiring any aftertreatment equipment on the vehicles.

The latest natural gas engines are the only zero emission equivalent or near zero engines that are certified to perform at 0.02 g/bhp-hr of nitrogen oxide (NOx) emissions or better and should not be confused with diesel engines certified to the 2010 EPA standard of 0.2 g/bhp-hr NOx standard.<sup>1</sup> The 0.02 g/bhp-hr NOx standard requires that new engines outperform the federal standard by 90 percent and is the cleanest heavy-duty engine standard today. It also is the lowest level currently recognized under California's Optional Low-NOx Standard (OLNS) for engines.

Additionally, if renewable natural gas (RNG) is used to produce CNG or LNG, life cycle greenhouse gas emissions from NGVs are reduced further. Using RNG also creates a market for energy produced from waste water treatment, landfills, animal waste and other methane sources, significantly increasing air quality by reducing the amount of methane released.

As was shown in our comments submitted May 9, 2017 (attached), in some duty cycles often even new diesel engines do not perform at the EPA standard for NOx reduction when operating at low speeds or idling, which is much of the operating time for many heavy duty vehicles (especially refuse trucks, transit and school buses, and drayage trucks in ports and loading areas). NGVAmerica strongly encourages the Idaho DEQ to use different types of alternative fuel applications and technologies that will reduce the most NOx for the funds expended as shown in the attached 2017 NGVA Comment Letter and NGVA VW Flyer.

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<sup>1</sup> See SCAQMD press release from June 3, 2016 providing details on the petition filed by state authorities urging the U.S. EPA to adopt the 0.02 NOx standard (<http://www.aqmd.gov/home/library/public-information/2016-news-archives/nox-petition-to-epa>) (Today's action follows a March 4 vote by the SCAQMD's Governing Board to formally petition the U.S. EPA to adopt a so-called "near-zero" or "ultra-low" emissions standard for heavy-duty truck engines that is 90 percent cleaner than the current standard).

The Idaho Volkswagen Beneficiary Mitigation Plan (Plan) does reflect the goals of the Trust and provides categories with percentages of total funding that will reduce significant NOx emissions. Besides Idaho's Plan goal of maximizing the amount of diesel emissions reduced each year per dollar spent, NGVAmerica applauds Idaho's focus on promoting widespread acceptance of alternative fuel vehicles (AFVs). To this point, NGVAmerica suggests that Idaho consider the approach that Colorado has taken to minimize any VW funds spend on diesel projects.

In reviewing Idaho's project evaluation criteria, NGVAmerica suggests adding an evaluation criteria segment for projects that promote the widespread growth of AFVs by providing partnerships that will fund infrastructure for non-electric AFVs. Additionally, projects in attainment areas that provide connecting stations between non-attainment areas (creating AFV corridors) should be viewed favorably.

In our January 5, 2018 comments NGVAmerica recommended the use of the new (August 2017) 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 (*other tools such as the EPA DEQ are not using current emissions and cost 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 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>

ANL has also just released a new VW heavy-duty vehicle emissions calculator (HDVEC) to provide state officials and fleet managers with an accurate tool to gauge emissions reductions across various medium- and heavy-duty vehicle project options affiliated with the Volkswagen Environmental Mitigation Trust Settlement. The HDVEC tool is available at: <http://afleet-web.es.anl.gov/hdv-emissions-calculator/>.

In using either the AFLEET or HDVEC tools, the options for the NGV low-NOx engine, renewable fuels, and the in-use diesel factors should be used to gain the full advantage of the current data that produces more accurate estimations.

Lastly, Idaho has not stated in their Plan the percents of funding planned for use by type of vehicle. NGVAmerica strongly recommends that Idaho strive to achieve "parity" between fuels by following a model similar to Colorado's Plan where all alternative fuels are funded at 40% of the vehicle cost for government and public entities, while private vehicles are funded at 25% of the vehicle cost (not the 75% allowed for EVs because that would use the funds for a smaller number of vehicles (reducing less NOx) and there are other sources for EV funding).

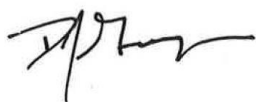
## Summary of NGVAmerica's Recommendations for EMT Funding

- ✓ 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 and HDVEC tools** are the most current tools available

NGVAmerica and its members are eager to serve as a resource to assist the Idaho DEQ in its finalization 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 Idaho. Please contact Jeff Clarke, NGVAmerica General Counsel & Director of Regulatory Affairs at 202.824.7364 or [jclarke@NGVAmerica.org](mailto:jclarke@NGVAmerica.org), or Sherrie Merrow, Director of State Government Advocacy 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