



December 18, 2017

Mr. Brett Rude
Mr. Mike Boyer
Washington State Department of Ecology
300 Desmond Drive SE
Lacey, WA 98503

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

Dear Brett and Mike:

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 Washington (WA) Department of Ecology's Proposed Volkswagen (VW) Beneficiary Mitigation Plan (Plan). These comments are in addition to the NGVAmerica comments submitted to you on March 10, 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.

Washington has a significant opportunity to use the VW Trust funds (\$112.75 million) to positively impact the future of its transportation system. As stated by Governor Jay Inslee, "By investing in zero emission and near zero emission vehicles, vessels and infrastructure, we can dramatically reduce pollution, better protect the public, and slash carbon emissions in Washington."

The goals stated in the WA Plan align with the EMT goals to:

- Reduce emissions from diesel engines in the state where the 2.0 and 3.0 liter Volkswagen vehicles were, are, or will be operated.
- Fully mitigate the total, lifetime excess Nitrogen oxide (NOx) emissions of the subject vehicles.

Additionally, the Principles to be applied of addressing air quality in communities that have historically borne a disproportionate share of air pollution, maximizing air quality co-benefits beyond NOx reductions, and maximizing public health benefits, will provide real benefit to the citizens of Washington.

Project priorities as stated in the proposed Plan reflect the Governor's stated objective of making investments in zero and near-zero emission vehicles, however the plan appears to provide a stronger priority for electric vehicles than other clean technologies. NGVAmerica strongly encourages the Department of Ecology to prioritize investments in natural gas 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 Washington's air

quality immediately at a much lower cost than other clean technologies (please refer to NGVAmerica's March 10, 2017 Comment Letter for additional information).

Additional comments based on NGVAmerica research and analysis follow.

Current State Beneficiary Mitigation Plans

Fourteen states have released draft VW Mitigation Plans and NGVAmerica has reviewed these plans and offered comments to these 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).

Washington's Plan has also included segments with funding percentages that make sense for the state's needs. The Plan's emphasis on heavy duty on-road vehicles and marine applications aligns with the major sources of air pollution. The WA Plan does not state the grant percentages to be given to the alternative fuel vehicle types and NGVAmerica suggests that Washington follow the parity solution offered by the Colorado Plan as follows:

- New diesel only allowed for fleets of 9 trucks or less
- Government and public entities funded at about 40% of total vehicle cost with caps
- Private entities funded at about 25% of total vehicle cost with caps

Additional Options for Vehicle Scrappage

NGVAmerica also recommends that the WA Department of Ecology 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

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 and tool link is: <http://www.afdc.energy.gov/tools>

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 to begin**
- ✓ 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 Washington Department of Ecology 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 Washington. Please contact Jeff Clarke, NGVAmerica General Counsel & Director of Regulatory Affairs at 202.824.7364 or jclarke@NGVAmerica.org, or me at 303.883.5121 or smerrow@NGVAmerica.org to set up a meeting and for additional information.

Sincerely,



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