



Background

In September 2015, the United States Environmental Protection Agency (EPA) issued the car company Volkswagen a notice of violation and directed it to recall nearly half a million cars, saying the automaker admitted to installing emissions control defeat devices. The United States filed a complaint against Volkswagen, Audi, and Porsche (collectively “VW”) on behalf of EPA on January 4, 2016, in the U.S. District Court for the Northern District of California (the Court). The complaint alleges that approximately 500,000 model year 2009 – 2016 VW/Porsche/Audi 2.0 liter diesel engines and an additional 90,000 3.0 liter diesel engines sold by VW are equipped with defeat devices, which are prohibited under the Clean Air Act. The defeat devices VW installed allow up to 40 times the legal limit of nitrogen oxide (NO_x) emissions to be released from these vehicles. These defeat devices are computer software designed to cheat federal emissions tests. The software can detect when the car is being tested and it activates its emissions controls equipment. When the car is not being tested, however, the software turns the equipment down, increasing the car’s emissions above legal limits.

Through a series of three partial settlements in 2016 and 2017, EPA and VW resolved these allegations. On October 25, 2016, a partial settlement was finalized between VW, the United States, and the State of California, addressing 2.0 liter diesel engines. Under the settlement, VW was required to establish and fund a \$2.7 billion environmental mitigation trust (the trust) to fund projects that will mitigate the excess emissions from the subject vehicles. The parties finalized a second partial settlement agreement to address the 3.0 liter diesel engines on May 11, 2017, which required VW to pay an additional \$225 million to the mitigation trust. On March 15, 2017, the Court appointed Wilmington Trust, N.A. to serve as the trustee.

Of the \$2.9 billion total in the trust, Wyoming is allocated \$8,125,000, and may use these funds over the next ten years. Wyoming was deemed a beneficiary of the trust in January 2018, and must submit this mitigation plan to the trustee.

Appendix D Section 4.1 of the 2.0 liter partial settlement and Section 4.1 of the final Environmental Mitigation Trust Agreement for State Beneficiaries detail the five Beneficiary Mitigation Plan requirements:

1. The Beneficiaries overall goal for the use of the funds;
2. The categories of Eligible Mitigation Actions the Beneficiary anticipates will be appropriate to achieve the stated goals and the preliminary assessment of the percentages of funds anticipated to be used for each type of Eligible Mitigation Action;
3. A description of how the beneficiary will consider the potential beneficial impact of the selected Eligible Mitigation Actions on air quality in areas that bear a disproportionate share of the air pollution burden within its jurisdiction;

4. A general description of the expected ranges of emissions benefits the Beneficiary estimates would be realized by implementation of the Eligible Mitigation Actions identified in the Beneficiary Mitigation Plan; and
5. An explanation of the process by which the beneficiary shall seek and consider public input on its Beneficiary Mitigation Plan.

The Wyoming Department of Environmental Quality (WDEQ) provides this Beneficiary Mitigation Plan addressing these five necessary elements to the level of detail reasonably available at the time of submission. The plan does not imply any rights to claim an entitlement under the settlement by any party other than Wyoming as the designated beneficiary.

Public Input Process

Wyoming Governor Matthew Mead designated WDEQ as the lead agency in administering the mitigation plan. WDEQ consulted with the Wyoming Department of Transportation and the Wyoming Department of Education to identify potential goals and eligible mitigation actions that would be effective in Wyoming.

WDEQ solicited public input on how best to utilize the State's allocated mitigation funds through WDEQ's website and online comment function. The public received notification of this opportunity through public notice on the WDEQ website and statewide media release. This public comment opportunity lasted 30 days and ended on May 24, 2017. WDEQ received public input through mail, phone, and online comment function of its website. As a result of comments received, WDEQ expanded the list of priority Eligible Mitigation Actions. WDEQ held several stakeholder meetings to solicit input on development of this mitigation plan. Stakeholders included representation from the Wyoming Governor's Office, WDEQ, Wyoming Department of Transportation, Wyoming Department of Education, Natural Gas Vehicles for America, Yellowstone-Teton Clean Cities Coalition, Black Hills Energy, Energy Conservation Works, Cummins, and the Wyoming Business Council.

Future changes or updates to the plan, whether they are a result of the public input process or other unforeseeable circumstances, will be made available to the trustees and posted to WDEQ's website. This plan has been drafted with the most recently available information to date.

Overall Goal of the Mitigation Plan

WDEQ has developed the following goals for implementation of the mitigation plan.

1. To provide efficient and effective implementation of Eligible Mitigation Actions in the reduction of nitrogen oxide (NO_x).
 - a. The objective of the settlement is to reduce NO_x. While doing so, reductions of greenhouse gases and particulate matter will also likely occur.
2. To support the Wyoming Department of Transportation Alternative Fuels Corridor Plan which nominates the transportation routes to be designated as Alternative Fuel Corridors for propane, electric vehicle supply equipment (EVSE), and compressed natural gas (CNG).

WDEQ will issue a Request for Proposal (RFP) soliciting project proposals that meet the Eligible Mitigation Actions criteria. The following criteria will be used in selection and ranking of proposals received:

1. Greatest NO_x emissions reductions.
2. Cost/benefit - Projects that achieve the highest emission reductions at the lowest cost.
3. Potential for achieving measurable NO_x emission reductions in nonattainment areas.
4. NO_x emission reduction benefits to areas of greater population density.
5. NO_x emission reduction benefits to sensitive populations, such as children and the elderly.

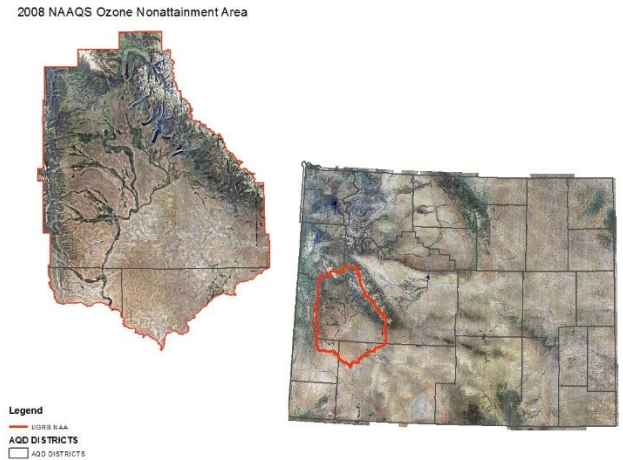
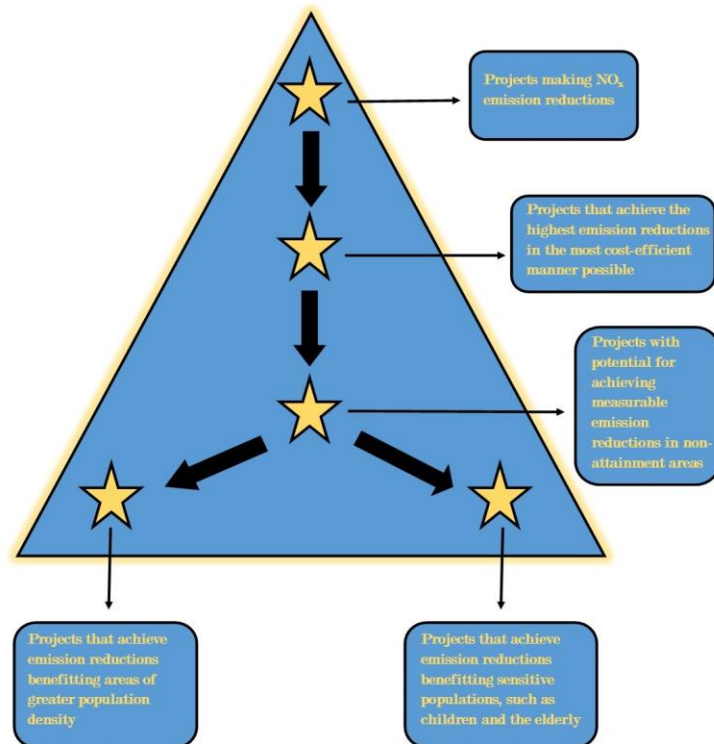


Figure 1: The State of Wyoming and the Upper Green River Basin Nonattainment Area (2008 Ozone National Ambient Air Quality)

WDEQ Project Proposal Evaluation Criteria



Eligible Mitigation Actions

The 2.0 liter partial settlement identifies ten categories of Eligible Mitigation Actions. The ten categories are:

1. Class 8 Local Freight Trucks and Port Drayage Trucks
2. Class 4 – 8 School Bus, Shuttle Bus, or Transit Bus
3. Freight Switchers (Locomotives)
4. Ferries/Tugs
5. Ocean Going Vessels (OGV) Shorepower
6. Class 4 – 7 Local Freight Trucks (Medium Trucks)
7. Airport Ground Support Equipment
8. Forklifts and Port Cargo Handling Equipment
9. Light Duty Zero Emission Vehicle Supply Equipment
10. Diesel Emission Reduction Act (DERA) Option

Not all of the Eligible Mitigation Actions are attainable in Wyoming. Through WDEQ assessment of the ten categories and input received from stakeholders and the public, the state will focus its efforts on the following eligible categories: Actions 1, 2, 6, 7, 9, and 10.

1. Class 8 Local Freight Trucks (Eligible Large Trucks)

84% - Percentage reduction for NO_x emissions from class eight local freight trucks.

- a. Eligible Large Trucks include 1992 – 2006 model year Class 8 Local Freight.
- b. Eligible Large Trucks must be scrapped if being replaced.
- c. Eligible Large Trucks may be repowered with any diesel or Alternate Fueled engine or All-Electric engine, or may be replaced with any new diesel or Alternate Fueled or All-Electric Vehicle, with the model year in which the Eligible Large truck Mitigation Action occurs.
 1. The original engine must be scrapped after repower has been completed.
- d. For Non-Government Owned Eligible Class 8 Local Freight Trucks, recipients may be eligible for reimbursement up to:
 1. 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g. Compressed Natural Gas (CNG), Propane, Hybrid) vehicle.
 2. 25% of the cost of a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) vehicle.
 3. 75% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
 4. 75% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.
- e. For Government Owned Eligible Class 8 Large Trucks, recipients may be eligible for reimbursement up to:

1. 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) engine, including the costs of installation of such engine.
2. 100% of the cost of a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) vehicle.
3. 100% of the cost of a Repower with a new All-Electric engine, including the cost of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
4. 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.



Estimated Emissions Reduction Benefit

Class 8 Replacement	NO _x (TPY)	PM _{2.5} (TPY)	CO ₂
Amount Reduction	1.9	.01	56
Percent Reduction	84%	97%	10%

*Estimated emissions benefit calculated with EPA Diesel Emissions Quantifier with model year 2000 as baseline.

2. Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)

92%

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Percentage reduction for NO_x emissions from school bus replacement technology.

- a. Eligible Buses include 2006 model year or older class 4-8 school buses, shuttle buses, or transit buses.
- b. Eligible buses must be scrapped if being replaced.
- c. Eligible buses may be repowered with any new diesel or Alternate Fueled or All-Electric vehicle, with the model year in which the Eligible Bus Mitigation Action occurs.
 1. The original engine must be scrapped after repower has been completed.
- d. For Non-Government Owned Buses, recipients may be eligible for reimbursement up to:
 1. 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) engine, including the costs of installation of such engine.

2. 25% of the cost of a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) vehicle.
 3. 75% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
 4. 75% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.
- e. For Government Owned Eligible Buses, recipients may be eligible for reimbursement up to:
1. 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) engine, including the costs of installation of such engine.
 2. 100% of the cost of a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) vehicle.
 3. 100% of the cost of a Repower with a new All-Electric engine, including the cost of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
 4. 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

Estimated Emissions Reduction Benefit

School Bus Replacement	NO _x (TPY)	PM _{2.5} (TPY)	CO ₂
Amount Reduction	.11	.01	3.2
Percent Reduction	92%	98%	20%

*Estimated emissions benefit calculated with EPA Diesel Emissions Quantifier with model year 2000 as baseline





6. Class 4-7 Local Freight Trucks (Medium Trucks)

94% - Percentage reduction for NO_x emissions from refuse hauler replacement technology.




- a. Eligible Medium trucks include 1992-2006 model year class 4-7 Local freight trucks.
- b. Eligible Medium Trucks must be scrapped if being replaced.
- c. Eligible medium Trucks may be Repowered with any new diesel or Alternate Fueled or All-Electric engine, or may be replaced with any new diesel or Alternate Fueled or All-Electric vehicle, with the model year in which the Eligible Medium Trucks Mitigation Action occurs.
 1. The original engine must be scrapped after repower has been completed.
- d. For Non-Government Owned Eligible Medium Trucks, recipients may be eligible for reimbursement up to:
 1. 40% of the cost of a Repower with a new diesel or Alternate fueled (CNG, propane, Hybrid) or All-Electric engine, including the costs of installation of such engine.

2. 25% of the cost of a new diesel or Alternate Fueled (CNG, propane, Hybrid) or All-Electric vehicle.
 3. 75% of the cost of Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
 4. 75% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.
- e. For Government Owned Eligible Medium Trucks, recipients may be eligible for reimbursement up to:
1. 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) engine, including the costs of installation of such engine.
 2. 100% of the cost of a new diesel or Alternate Fueled (e.g. CNG, propane, Hybrid) vehicle.
 3. 100% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
 4. 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.






Class Four: 14,001 to 16,000 lbs.

			
City Delivery	Conventional Van	Landscape Utility	Large Walk In








Class Five: 16,001 to 19,500 lbs.

		
Bucket	City Delivery	Large Walk In

Class Six: 19,501 to 26,000 lbs.

				
Beverage	Rack	School Bus	Single Axle Van	Stake Body

Class Seven: 26,001 to 33,000 lbs.

			
City Transit Bus	Furniture	High Profile Semi	Home Fuel
			
Medium Semi Tractor	Refuse	Tow	

Estimated Emissions Reduction Benefit

Refuse Hauler Replacement	NO_x (TPY)	PM_{2.5} (TPY)	CO₂
Amount Reduction	.5	.02	1.1
Percent Reduction	94%	97%	2.5%

*Estimated emissions benefit calculated with EPA Diesel Emissions Quantifier with model year 2000 as baseline

7. Airport Ground Support Equipment

- a. Eligible Airport Ground Support Equipment includes:
 - 1. Tier 0, Tier 1, or Tier 2 diesel powered airport ground support equipment; and
 - 2. Uncertified or certified to 3g/bhp-hr or higher emissions, spark ignition engine powered airport ground support equipment.
- b. Eligible Airport Ground Support Equipment must be scrapped.
- c. Eligible Airport Ground Support Equipment may be Repowered with an All-Electric engine, or may be replaced with the same Airport Ground Support Equipment in an All-Electric form.
 - 1. The original engine must be scrapped after repower has been completed.
- d. For Non-Government Owned Eligible Airport Ground Support Equipment, recipients may be eligible for reimbursement up to:
 - 1. 75% of the cost of a Repower with a new All-Electric engine, including costs of installation of such engine, and charging infrastructure associated with such new All-Electric engine.
 - 2. 75% or the cost of a new All-Electric Airport Ground Support Equipment, including charging infrastructure associated with such new All-Electric Airport Ground Support Equipment.
- e. For Government Owned Eligible Airport Ground Support Equipment, recipients may be eligible for reimbursement up to:
 - 1. 100% of the cost of a Repower with a new All-Electric engine, including costs of installation of such engine, and charging infrastructure associated with such new All-Electric engine.
 - 2. 100% of the cost of a new all-Electric Airport Ground Support Equipment, including charging infrastructure associated with such new All-Electric Airport ground Support Equipment.

9. Light Duty Zero Emission Vehicle Supply Equipment

Each Beneficiary may use up to fifteen percent (15%) of its allocation of Trust Funds necessary for, and directly connected to, the acquisition, installation, operation and maintenance of new light duty zero emission vehicle supply equipment for projects as specified below. Provided, however, that Trust Funds shall not be made available or used to purchase or rent real estate, other capital costs (e.g., construction of buildings, parking facilities, etc.) or general maintenance (i.e., maintenance other than of the supply equipment).

15% - Allocation that each beneficiary may use on various applications for the cost of new light duty zero emission vehicle supply equipment.

85% - Allocation that each beneficiary may use on other applications such as Class 8 local freight trucks and Class 4-8 school buses, shuttle buses, or transit buses.

100% - Allocated funds applied by each beneficiary towards making impactful NOx emission reductions in the State of Wyoming.

- a. Light duty electric vehicles supply equipment includes Level 1, Level 2, or fast charging equipment (or analogous successor technologies) that is located in a public place, workplace, or multi-unit dwelling and is not consumer light duty electric supply equipment (i.e., not located at a private residential dwelling that is not a multi-unit dwelling).
- b. Subject to the 15% limitation above, each recipient may be eligible for reimbursement up to:
 1. 100% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that will be available to the public at Government Owned Property.
 2. 80% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that will be available to the public at Non-Government Owned Property.
 3. 60% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that is available at a workplace but not to the general public.
 4. 60% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that is available at a multi-unit dwelling but not to the general public.

Trust Funds may be applied for projects that initiate and stimulate the continued development of electric vehicle charging infrastructure. The application of Trust Funds towards the development of electric charging stations along the tourism travel corridors between Cheyenne and Yellowstone National Park/Teton National Park aligns with existing Wyoming Department of Transportation (WYDOT) initiatives regarding alternative fueling methods. Furthermore, such an application of funds would help provide stimulus for future planning and development of WYDOT initiatives that more significantly expand the viability for electric charging stations across the State. The Trust Funds, therefore, may be used to initiate and stimulate the development of electric charging stations and other alternative fueling infrastructure in Wyoming.

10. Diesel Emission Reduction Act (DERA) Option

Eligible Mitigation Option 10 (DERA Option) allows beneficiaries to use Trust funds for their non-federal match or overmatch pursuant to Title VII, Subtitle G, Section 793 of the DERA program in the Energy Policy Act of 2005 (codified at 42 U.S.C. 16133). Beneficiaries may therefore use such Trust Funds for actions not specifically enumerated in Appendix D-2, but are otherwise eligible under DERA pursuant to all DERA guidance documents available through the EPA. Any matching DERA funds must be used following the DERA requirements.

The DERA option allows states to fund projects that would be ineligible under VW Eligible Mitigation Actions 1 through 9. Wyoming anticipates using Option 10 as a way to fund diesel emission reduction projects that are not engine or vehicle replacements, but will nonetheless result in significant NOx reductions.

Funding requirements under DERA include a mandatory cost share that is the responsibility of the grantee. States and territories that match the base amount dollar for dollar receive an additional amount of EPA DERA funding to add to the grant (50% of the base amount). This non-federal voluntary match can be state or territorial funds, private funds, or settlement funds such as those from the beneficiary's allocation under the mitigation trust. Under the DERA option, beneficiaries may draw funds from the trust for their non-federal match on a 1:1 basis or greater than 1:1 basis.

Wyoming's DERA base allocation for fiscal year 2017 is \$222,712.00 and the State plans to overmatch these funds with Trust funds. EPA's match incentive would then be \$111,356.00. The State has identified a number of potential projects that would qualify under Option 10, and the Wyoming Department of Environmental Quality is currently coordinating with other state agencies as well as industry groups in the state to select projects likely to achieve the greatest amount of emissions reductions.

DERA grant recipients must file quarterly and final reports and any beneficiary using the DERA Option may fulfil reporting requirements by submitting reports to the trustee. Wyoming anticipates using this option to fulfil the reporting requirements of its DERA grants.