

Beneficiary Mitigation Plan
For the
State of South Carolina
Under the
Volkswagen Environmental Mitigation Trust



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I. BACKGROUND AND INTRODUCTION

In September 2015, following investigations by the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB), Volkswagen (VW) officials admitted to installing “defeat devices” on certain diesel vehicles sold in the United States. These devices were intended to cheat diesel emissions tests under the United States Clean Air Act and the California Health and Safety Code by causing the emissions controls system to perform differently during normal vehicle operations versus during emissions testing. This intentional cheating resulted in the emissions of nitrogen oxides (NOx) that were significantly in excess of compliant levels. After an investigation and civil and criminal litigation, it was determined that these defeat devices had been installed in nearly 600,000 2.0 liter and 3.0 liter VW, Audi, and Porsche branded diesel vehicles sold in the United States.

The United States and California subsequently entered into a series of partial court settlements to remedy the environmental and economic harm caused by the use of these defeat devices. On October 25, 2016, the United States District Court for the Northern District of California approved the first partial consent decree relating to the approximately 500,000 2.0 liter diesel engine vehicles containing these defeat devices. On May 17, 2017, the Court approved the second partial consent decree relating to the approximately 90,000 3.0 liter diesel engine vehicles containing these defeat devices.

As a condition of the first partial consent decree, Volkswagen is required to mitigate excess emissions through the establishment of an Environmental Mitigation Trust (EMT or Trust). The first partial consent decree required Volkswagen to make a total of \$2.7 billion in payments (\$900 million per year over three years) to the Trust; the second partial consent decree required an additional \$225 million contribution to the Trust to remediate excess NOx emitted by the 3.0 liter vehicles, bringing the total allocation to the Environmental Mitigation Trust to \$2.925 billion.

The \$2.925 billion is allocated for the benefit of the 50 states, the District of Columbia, and Puerto Rico, collectively the beneficiaries under the Trust. Each beneficiary’s allocation is based upon the number of subject vehicles registered in each jurisdiction with a minimum funding allocation of \$7.5 million per beneficiary. Based upon this calculation, South Carolina’s combined allocation under the EMT is \$33,895,491.39, which represents 1.16% of the total.

On June 14, 2017, Governor Henry McMaster announced the South Carolina Department of Insurance (SCDOI) as the lead agency in administering South Carolina’s allocation under the EMT. On October 2, 2017, the District Court approved the Finalized Trust Agreement between the National Trustee (Wilmington Trust, N.A.), the United States, California, and Volkswagen. This Trust Agreement required each beneficiary to submit a Certification for Beneficiary Status Under Environmental Mitigation Trust Agreement (Appendix D-3 of the Finalized Trust Agreement). On November 21, 2017, the SCDOI filed the executed Certification on behalf of the state. On January 29, 2018, the National Trustee officially

designated South Carolina as a beneficiary; the South Carolina Department of Insurance will serve as the lead agency for the State of South Carolina.

II. AIR QUALITY IN SOUTH CAROLINA

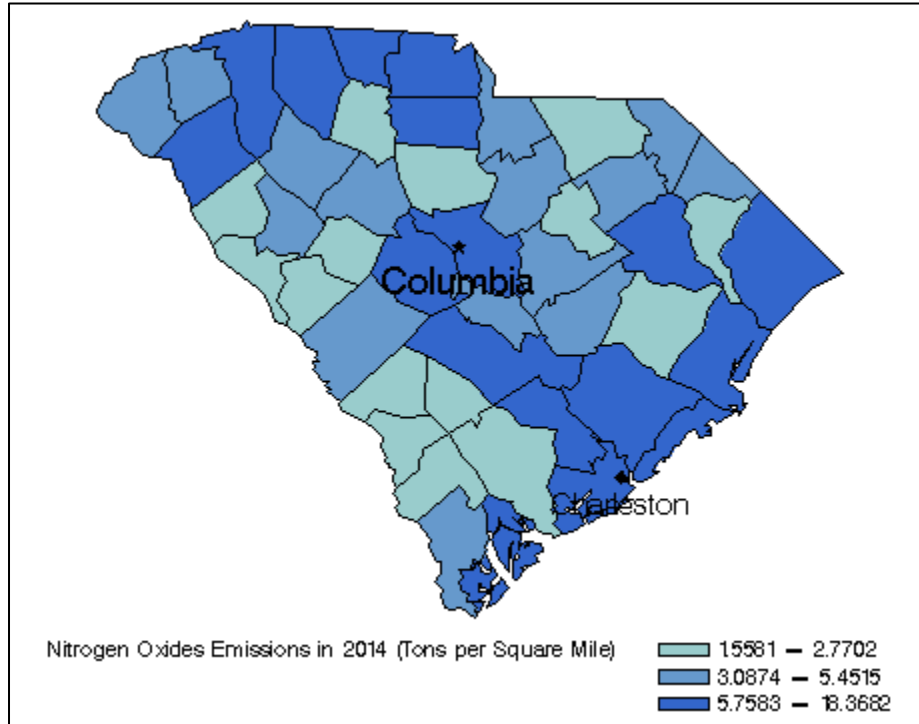
Emissions of NO_x contribute to the formation of ground-level ozone, which can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. At elevated levels, ozone can be especially harmful to individuals with asthma, emphysema, or bronchitis. Due to the public health concerns, the EPA sets a mandatory standard for ground-level ozone through the Clean Air Act National Ambient Air Quality Standards (NAAQS). Fortunately, all counties in the State of South Carolina are in attainment of the NAAQS, including the 2015 standard for ozone (i.e., 70 parts per billion). Figure 1 shows 2014 NO_x emissions in the State of South Carolina by county. This indicates that South Carolina residents are already enjoying the benefits of air quality that meets or exceeds the NAAQS. The NAAQS are set to protect public health and the environment. Counties in every state must plan to meet this standard to be considered in “attainment” of the standard. Counties in states that do not meet the ozone standard are classified as in “non-attainment.”

Even though counties in South Carolina do not currently represent any major air quality issues, the Trust represents an opportunity for the South Carolina Department of Insurance to fund projects that result in significant reductions in NO_x emissions. Therefore, we intend to review the benefits of proposed projects across the state, rather than prioritizing any specific area(s) within the state.

As can be seen in Figure 2, mobile emissions of NO_x represent over 65% of all NO_x emissions in South Carolina. The Trust presents the State of South Carolina with a unique opportunity to improve air quality by reducing emissions from mobile sources. Mobile emissions are the largest contributor of NO_x in the state, accounting for over 125 thousand tons a year. With the implementation of the Trust, the State of South Carolina can support projects that replace or repower diesel-powered vehicles with engines that are less polluting and more efficient. Ultimately, this improves the health and well-being of all residents of South Carolina.

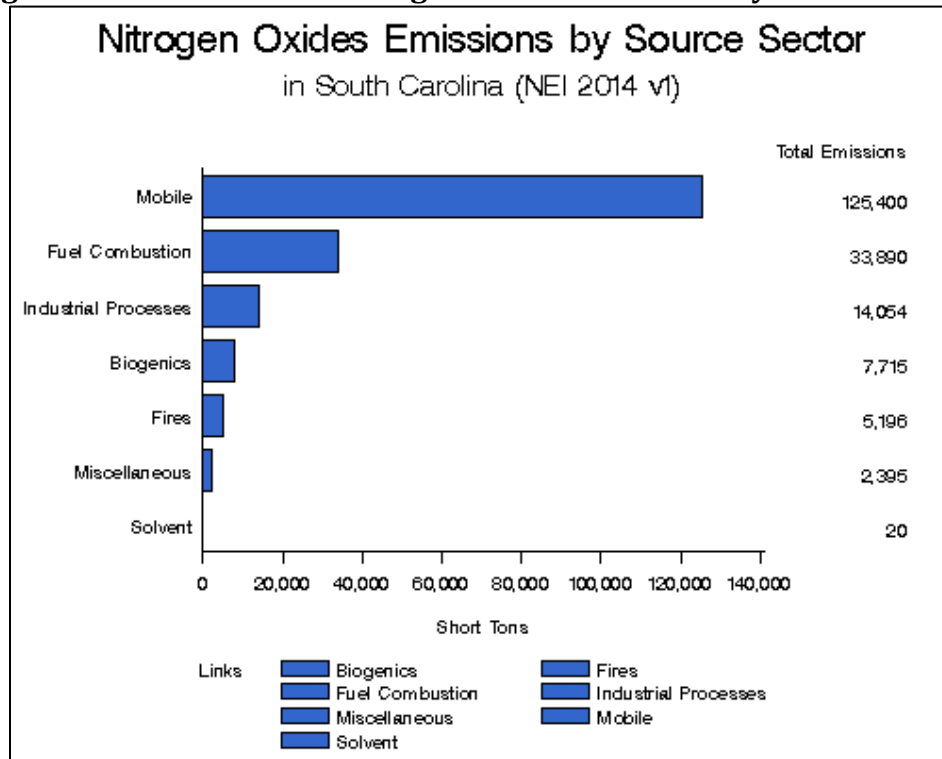
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Figure 1: 2014 Nitrogen Oxides Emissions — South Carolina, by County



Source: [Air Emissions Sources – South Carolina State Summary, EPA](#) (accessed 1/24/18)

Figure 2: South Carolina Nitrogen Oxides Emissions by Sources Sector



Source: [Air Emissions Sources – South Carolina State Summary, EPA](#) (accessed 1/24/18)

III. OVERVIEW OF ENVIRONMENTAL MITIGATION PLAN AND GOALS

The Trust requires each beneficiary to develop a Beneficiary Mitigation Plan (BMP) that summarizes how the beneficiary plans to use the mitigation funds allocated under the Trust, addressing:

1. the beneficiary's 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; and
4. a general description of the expected ranges of emission benefits the beneficiary estimates would be realized by implementation of the eligible mitigation actions identified in the Beneficiary Mitigation Plan.

The BMP need only provide the level of detail that is reasonably ascertainable at the time of submission and is intended to provide the public with insight into South Carolina's high-level vision for use of the mitigation funds as well as information about the specific uses for which funding is expected to be requested.

South Carolina's overall goal is to reduce future NO_x emissions while focusing on the state's needs. Accordingly, the following general factors will be part of the project review process:

- NO_x emissions reductions;
- The state's needs;
- Cost effectiveness;
- Benefits to areas that experience disproportionate levels of air pollutants;
- Public health benefits, including those for more vulnerable populations;
- Environmental justice issues;
- Current and long-term environmental and economic benefits;
- Leveraged funding opportunities;
- Other potential funding sources; and
- Demonstrated experience and/or ability to implement the project.

South Carolina has the discretion to adjust its priorities, goals and objectives and specific funding strategy as necessary to achieve this plan's goals. Any updates that are necessitated by such an adjustment will be made publicly available on the VW website (vwsettlement.sc.gov) and will be submitted to the National Trustee.

This Beneficiary Mitigation Plan is not a solicitation for projects. The Department will be issuing a series of requests for applications which will be published on the VW website and sent to interested parties that have signed up for our [email distribution list](#) (select "VW Settlement" distribution list under "News Flash").

IV. AVAILABLE FUNDING AND ELIGIBLE APPLICANTS

South Carolina's combined allocation under the Environmental Mitigation Trust is \$33,895,491.39 (1.16% of the \$2.925 billion allocated).

Both government and non-government entities are eligible to apply for funding for purposes of implementing Eligible Mitigation Actions as set forth in Appendix D-2. A Federal Agency will be considered a non-government entity for purposes of funding limitations as set forth in Appendix D-2.

Under the terms of the Finalized Trust Agreement, South Carolina can request up to one-third of its total allocation during the first year and up to two-thirds of its total allocation during the first two years after VW's initial deposit into the Trust.

South Carolina must expend or obligate at least eighty percent (80%) of its allocation by the tenth anniversary of the Trust Effective Date. At that same time, Wilmington Trust, N.A., as National Trustee, must publish an accounting of all assets that have not yet been expended or obligated to approved Eligible Mitigation Actions or administrative costs. Any remaining balance will be re-allocated to beneficiaries that have demonstrated that they have expended at least 80% of their initial allocation in accordance with Subparagraph 5.4.

V. CATEGORIES OF ELIGIBLE MITIGATION ACTIONS

Beneficiaries under the Environmental Mitigation Trust are only allowed to utilize these funds on activities outlined in the Finalized Trust Agreement, the majority of which involve vehicle-for-vehicle or engine-for-engine replacements of older diesel engines or equipment. The replacement vehicles or engines need not utilize diesel for fuel; alternative fuel sources are also recognized, including electricity, propane, and natural gas. Eligible replacements are for the following categories of vehicles and equipment:

- Class 8 local freight trucks and port drayage trucks;
- Class 4-8 school, shuttle, and transit buses;
- Freight switcher locomotives;
- Ferry and tug boats;
- Shore power for ocean going vessels;
- Class 4-7 local freight trucks;
- Airport ground support equipment; and
- Forklifts and port cargo handling equipment.

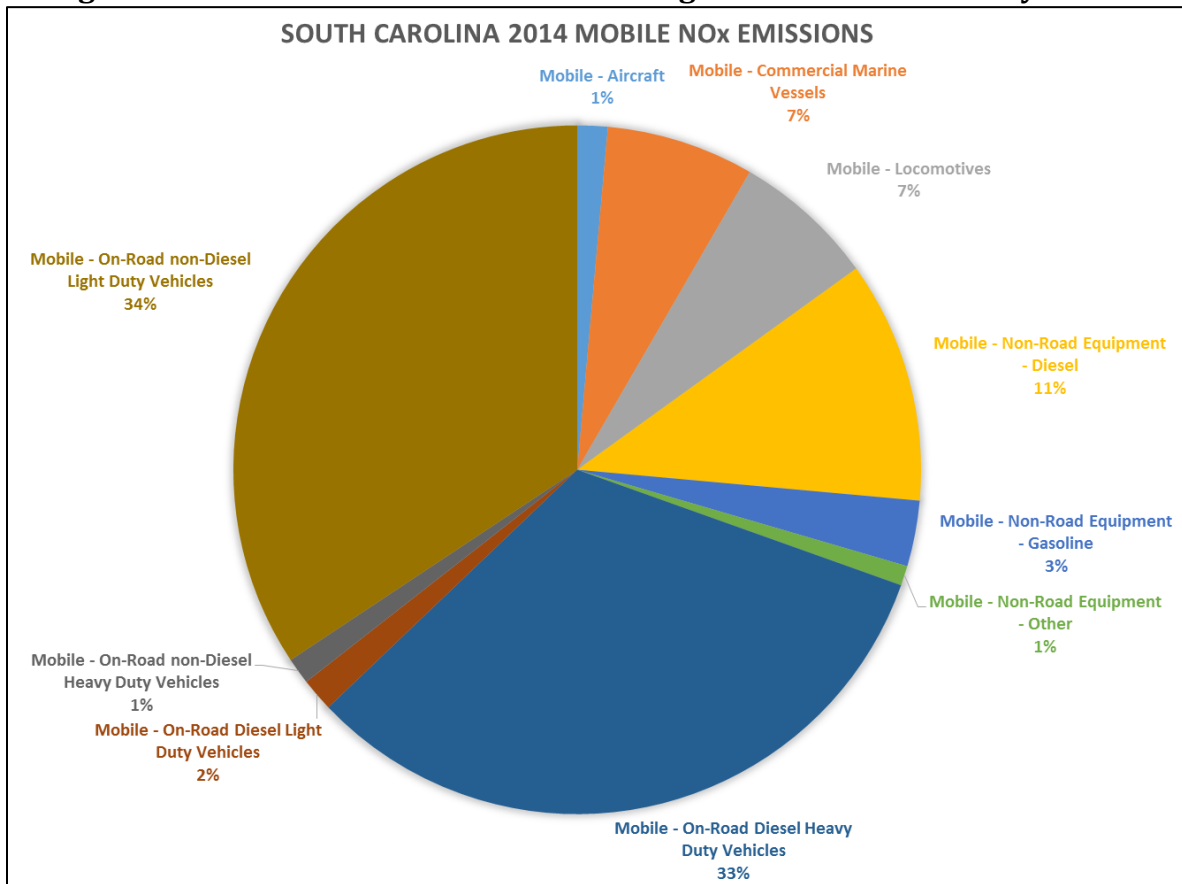
In addition, each beneficiary may utilize up to fifteen percent (15%) of its total allocation on the costs necessary for, and directly connected to, the acquisition, installation, operation and maintenance of new light duty zero emission vehicle (ZEV) supply equipment for allowable

projects. Finally, projects eligible for funding under the Diesel Emission Reduction Act (DERA) that are not otherwise specifically enumerated in Appendix D-2 are eligible.

a. South Carolina's NOx Emissions

According to the United States Environmental Protection Agency (EPA), the vast majority of South Carolina's mobile NOx emissions come from two sources: on-road non-diesel light duty vehicles (34%) and on-road diesel heavy duty vehicles (33%).

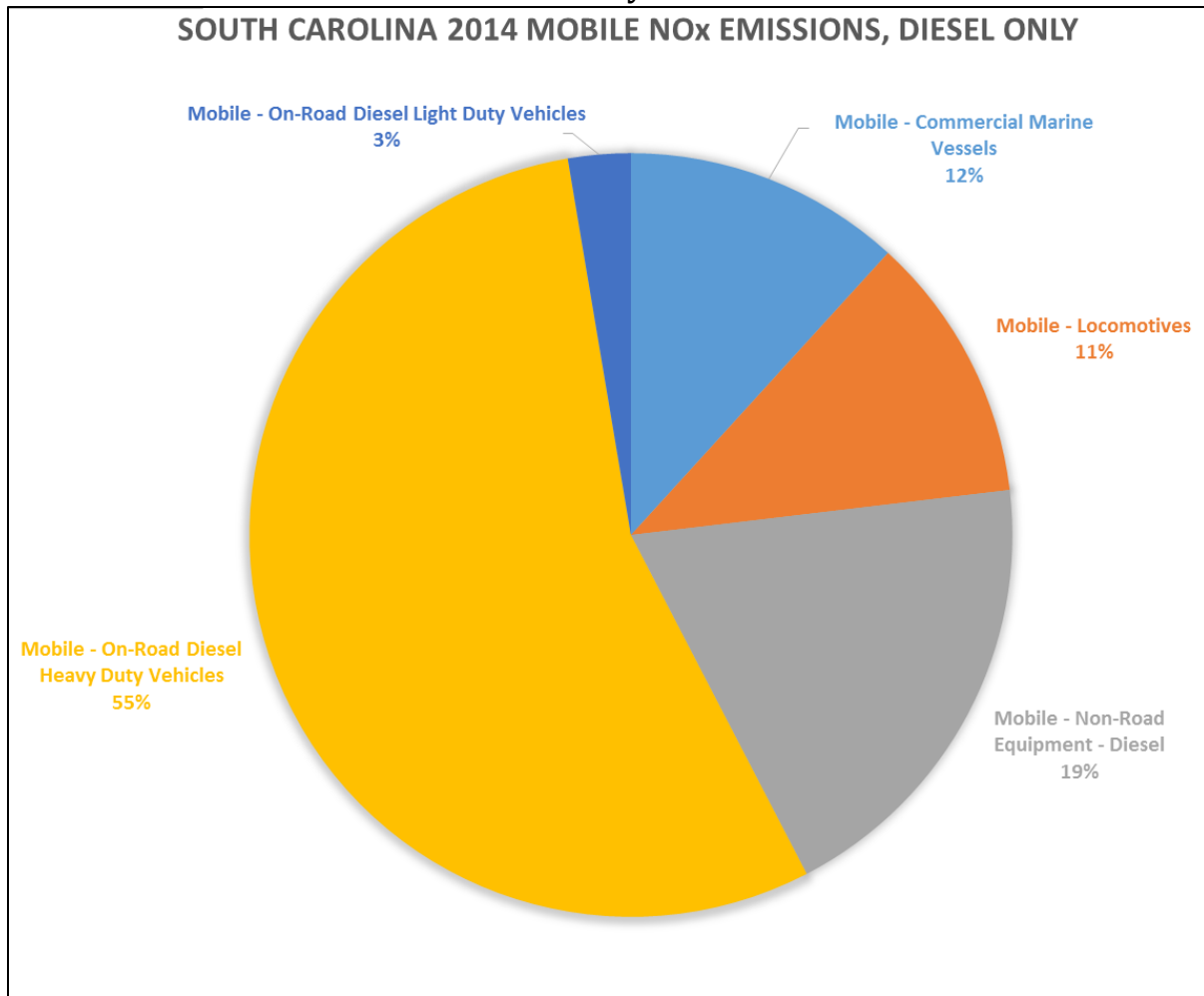
Figure 3: 2014 South Carolina Mobile Nitrogen Oxides Emissions by Source



Source: [2014 National Emissions Inventory \(NEI\) Data, EPA](#) (accessed 10/20/17)

Further, as Figure 4 demonstrates, over half (55%) of the diesel only NOx emissions come from on-road diesel heavy duty vehicles.

Figure 4: 2014 South Carolina Mobile Nitrogen Oxides Emissions by Source, Diesel Only



Source: [2014 National Emissions Inventory \(NEI\) Data, EPA](#) (accessed 10/20/17)

b. South Carolina's Funding Priorities

Given the primary sources of mobile NO_x emissions in the state and the considerations previously outlined, South Carolina's initial funding priorities will be focused on the following three categories of Eligible Mitigation Actions (listed in the order included in Appendix D-2). South Carolina's initial assessment of the percentages of funds anticipated to be used for each type of Eligible Mitigation Action is also noted.

Class 4-8 School, Shuttle and Transit Buses (Eligible Buses) (80-100%)

Eligible Buses include 2009 engine model year or older class 4-8 school buses, shuttle buses, or transit buses. For beneficiaries that have state regulations that already require upgrades to 1992-2009 engine model year buses at the time of the proposed Eligible Mitigation Action,

Eligible Buses shall also include 2010-2012 engine model year class 4-8 school buses, shuttle buses, or transit buses.

Eligible Buses must be scrapped; Eligible Buses 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 engine model year in which the Eligible Bus Mitigation Action occurs or one engine model year prior.

Pursuant to the Finalized Trust Agreement, South Carolina may only utilize EMT funds to cover the costs of selected, eligible projects up to the percentages allocated below:

<i>Maximum Allocations for Eligible Bus Projects</i>	Non-Government Owned Eligible Buses	Government Owned Eligible Buses and Privately-Owned School Buses Under Contract w/ a Public School District
Repower w/ a new diesel or Alternate Fueled engine, including the costs of installation	40%	100%
Repower w/ a new All-Electric engine, including the costs of installation and associated charging infrastructure	75%	100%
Replace w/ a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle	25%	100%
Replace w/ a new All-Electric vehicle, including associated charging infrastructure	75%	100%

Light Duty Zero Emission Vehicle (ZEV) Supply Equipment (0-10%)

As previously discussed, South Carolina may utilize up to 15% of its \$33,895,491.39 allocation toward ZEV supply equipment. South Carolina plans to utilize between zero and ten percent of its allocation toward ZEV supply equipment. This equates to a maximum allocation of \$3,389,549.14.

South Carolina intends to consider utilization of these funds for purposes of the acquisition, installation, operation and maintenance of new light duty ZEV supply equipment and, in accordance with the terms of the Finalized Trust Agreement, will not utilize EMT funds for the purchase or renting of real-estate, other capital costs, or general maintenance other than that of the ZEV supply equipment.

The following projects are eligible for funding:

- Light duty EV supply equipment including Level 1, Level 2 and Fast Charge equipment located in a public place, workplace, or multi-unit dwelling and is not located at any other private residential dwelling; and
- Light duty hydrogen dispensing equipment capable of dispensing hydrogen at a pressure of 70 megapascals (MPa) located in a public place.

Pursuant to the Finalized Trust Agreement, South Carolina may only utilize EMT funds to cover the costs of selected, eligible projects up to the percentages allocated below:

<i>Maximum Allocations for Eligible ZEV Supply Equipment Projects</i>	
Light Duty EV Supply Equipment	
Available to the public at a Government Owned property	100%
Available to the public at a Non-Government Owned property	80%
Available at a workplace but not to the general public	60%
Available at a multi-unit dwelling but not to the general public	60%
Hydrogen Fuel Cell Vehicle Supply Equipment	
Capable of dispensing at least 250 kg/day and available to the public	33%
Capable of dispensing at least 100 kg/day and available to the public	25%

Other Eligible Mitigation Actions (0-10%; Percentage Based Upon Availability of Funds)

As outlined in this Beneficiary Mitigation Plan, South Carolina will prioritize funding requests for the categories listed above, subject to the goals and considerations outlined in Section III. However, additional Eligible Mitigation Actions may be considered. Subject to the availability of funds, South Carolina may release a solicitation for projects that includes the opportunity to fund additional Eligible Mitigation Actions.

Eligible Mitigation Action Administrative Expenses (up to 1%)

The Finalized Trust Agreement permits beneficiaries to utilize Trust Funds for actual administrative expenditures associated with implementing Eligible Mitigation Actions, subject to a maximum allocation of 15%. South Carolina proposes to maximize the amount of Trust Funds that are expended on Eligible Mitigation Actions and to minimize its administrative expenses. Therefore, South Carolina intends to use no more than one percent of its allocation, or a maximum of \$338,954.91, for administrative expenditures associated with implementing the selected Eligible Mitigation Actions.

South Carolina's administrative costs will be allocated to each approved Eligible Mitigation Action project and will be distributed out of the funding allocated to that approved project.

To maximize the realized benefits of the selected projects to the state and its people, South Carolina does not intend to permit funding recipients to be reimbursed or otherwise compensated for their administrative expenditures associated with selected Eligible Mitigation Actions.

VI. ANTICIPATED BENEFITS

Anticipated benefits include, but are not limited to:

- Tons of NO_x, GHGs, and other pollutants reduced over the lifetime of the replacement engines and/or vehicles;
- Net reduction in gallons of diesel fuel used;
- Improved ambient air quality and health in South Carolina's communities; and
- Reduced exposure of the public to diesel particulate matter.

The realized benefits will vary depending upon the projects selected for funding and those selected for funding will be required to document anticipated benefits for the state, the National Trustee, and the public.

VII. PUBLIC COMMENTS AND INPUT ON THE SOUTH CAROLINA BENEFICIARY MITIGATION PLAN

a. Public Availability of Trust Documents

South Carolina is committed to an implementation process that is open and transparent. Public access to documentation related to funding requests and expenditures is provided by the South Carolina Freedom of Information Act, SC Code §30-4-10 et seq., and is broader than what is required of the state under the Environmental Mitigation Trust Agreement. However, specific to the Trust Agreement requirements, the public will be provided access to all documentation and records submitted by the state in support of each funding request and all documentation and records supporting expenditures of Trust Funds until the Termination Date. Expenditures will also be accounted for and audits conducted in accordance with the Trust documents and applicable South Carolina law. Resulting reports and other documentation will be made available to the Trustee, other parties, and the public as required by the Trust Agreement and state law. Public access to documents and information will be subject to §30-4-40 and other applicable laws governing the publication of personally identifiable, proprietary, or other confidential business information.

To facilitate public access to reports, proposals, and projects selected for funding (including documentation and records submitted by South Carolina in support of a funding request and

documentation and records supporting expenditures), such documentation and information will be posted on the VW website at vwsettlement.sc.gov. Additionally, a person may submit an email request for publicly available information to vwsettlement@doi.sc.gov or via United States mail addressed to:

Volkswagen Mitigation Trust
c/o South Carolina Department of Insurance
Lead Agency
Post Office Box 100105
Columbia, S.C. 29202-3105

Responses to requests for information shall be provided in accordance with the requirements of the South Carolina Freedom of Information Act.

b. Public Input on the Beneficiary Mitigation Plan

The Trust Agreement further requires the state to provide the procedures by which public input on the Beneficiary Mitigation Plan will be solicited and considered. The state recognizes the need (and the value that it will provide) to hear from and involve the various stakeholders and citizens of the state in developing and implementing the plan, and ultimately the projects that will most benefit the people of this state.

First Draft of the Beneficiary Mitigation Plan

The SCDOI published an [initial draft Beneficiary Mitigation Plan](#) on April 10, 2018. Upon publication, the SCDOI opened a 45-day public comment period, which concluded at 5:00 p.m. Eastern Daylight Time on May 25, 2018. During that time, the SCDOI also hosted a public meeting on May 1, 2018 to solicit comments and input from the public.

Additional details regarding the public meeting and the public comment period were provided in a [public notice](#) that was published on the VW website, on the Department's home page, and distributed to the interested parties that have signed up for our [email distribution list](#).

In response to its request for public comments, the SCDOI received comment letters from 39 interested parties. This includes the public comments made by presenters at the May 1, 2018 public meeting. On July 17, 2018, the SCDOI published a [summary](#) of the written comments received between April 10 and May 25, 2018 which included links to the latest comment letters from each interested party. That same day, the SCDOI published a [recording](#) of the May 1, 2018 public meeting as well as a [summary](#) thereof that included copies of all presentations and the written comments of each presenter. These materials may be viewed on the VW website at vwsettlement.sc.gov.

Second Draft of the Beneficiary Mitigation Plan

The SCDOI published a [second draft Beneficiary Mitigation Plan](#) on July 25, 2018. Upon publication of the second draft of the Beneficiary Mitigation Plan, the SCDOI opened a 30-day public comment period, which concluded at 5:00 p.m. Eastern Daylight Time on August 24, 2018.

Additional details regarding the public comment period were published on the VW website, on the Department's home page, and distributed to the approximately 230 interested parties that have signed up for our [email distribution list](#).

In response to its request for public comments, the SCDOI received comment letters from 57 interested parties. On September 27, 2018, the SCDOI published a [summary](#) of the written comments received between July 25 and August 24, 2018, which included links to the latest comment letters from each interested party. These materials may be viewed on the VW website at vwsettlement.sc.gov.

The majority of the comments received were supportive of funding being allocated for Eligible Buses and light duty zero emission vehicle supply equipment. Based on this, the decision was made to maintain the funding allocation percentages by category outlined in the second draft Beneficiary Mitigation Plan.

The ultimate goal of the public's participation is to ensure the best mitigation plan and project funding for the people of this state. Accordingly, the state recognizes the need for flexibility in this process and may find it necessary to provide additional opportunities for public input in the future.

APPENDIX

Appendix A: Eligible Mitigation Actions and Mitigation Action Expenditures from Appendix D-2 of the Finalized Trust Agreement

(See the following 13 pages.)

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APPENDIX D-2
Eligible Mitigation Actions and Mitigation Action Expenditures

APPENDIX D-2

ELIGIBLE MITIGATION ACTIONS AND MITIGATION ACTION EXPENDITURES

1. Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)
 - a. Eligible Large Trucks include 1992-2009 engine model year Class 8 Local Freight or Drayage. For Beneficiaries that have State regulations that already require upgrades to 1992-2009 engine model year trucks at the time of the proposed Eligible Mitigation Action, Eligible Large Trucks shall also include 2010-2012 engine model year Class 8 Local Freight or Drayage.
 - b. Eligible Large Trucks must be Scrapped.
 - c. Eligible Large Trucks may be Repowered with any new 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 engine model year in which the Eligible Large Trucks Mitigation Action occurs or one engine model year prior.
 - d. For Non-Government Owned Eligible Class 8 Local Freight Trucks, Beneficiaries may only draw funds from the Trust in the amount of:
 1. Up to 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. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
 3. Up to 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. Up to 75% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.
 - e. For Non-Government Owned Eligible Drayage Trucks, Beneficiaries may only draw funds from the Trust in the amount of:
 1. Up to 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. Up to 50% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.

3. Up to 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. Up to 75% of the cost of a new all-electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.
- f. For Government Owned Eligible Class 8 Large Trucks, Beneficiaries may draw funds from the Trust in the amount of:
1. Up to 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. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
 3. Up to 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. Up to 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

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

- a. Eligible Buses include 2009 engine model year or older class 4-8 school buses, shuttle buses, or transit buses. For Beneficiaries that have State regulations that already require upgrades to 1992-2009 engine model year buses at the time of the proposed Eligible Mitigation Action, Eligible Buses shall also include 2010-2012 engine model year class 4-8 school buses, shuttle buses, or transit buses.
- b. Eligible Buses must be Scrapped.
- c. Eligible Buses 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 engine model year in which the Eligible Bus Mitigation Action occurs or one engine model year prior.
- d. For Non-Government Owned Buses, Beneficiaries may draw funds from the Trust in the amount of:
 1. Up to 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. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.

3. Up to 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. Up to 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, and Privately Owned School Buses Under Contract with a Public School District, Beneficiaries may draw funds from the Trust in the amount of:
1. Up to 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. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
 3. Up to 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. Up to 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

3. Freight Switchers

- a. Eligible Freight Switchers include pre-Tier 4 switcher locomotives that operate 1000 or more hours per year.
- b. Eligible Freight Switchers must be Scrapped.
- c. Eligible Freight Switchers may be Repowered with any new diesel or Alternate Fueled or All-Electric engine(s) (including Generator Sets), or may be replaced with any new diesel or Alternate Fueled or All-Electric (including Generator Sets) Freight Switcher, that is certified to meet the applicable EPA emissions standards (or other more stringent equivalent State standard) as published in the CFR for the engine model year in which the Eligible Freight Switcher Mitigation Action occurs.
- d. For Non-Government Owned Freight Switchers, Beneficiaries may draw funds from the Trust in the amount of :
 1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine(s) or Generator Sets, including the costs of installation of such engine(s).
 2. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) Freight Switcher.

3. Up to 75% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).
 4. Up to 75% of the cost of a new All-Electric Freight Switcher, including charging infrastructure associated with the new All-Electric Freight Switcher.
- e. For Government Owned Eligible Freight Switchers, Beneficiaries may draw funds from the Trust in the amount of:
1. Up to 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine(s) or Generator Sets, including the costs of installation of such engine(s).
 2. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) Freight Switcher.
 3. Up to 100% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).
 4. Up to 100% of the cost of a new All-Electric Freight Switcher, including charging infrastructure associated with the new All-Electric Freight Switcher.

4. Ferries/Tugs

- a. Eligible Ferries and/or Tugs include unregulated, Tier 1, or Tier 2 marine engines.
- b. Eligible Ferry and/or Tug engines that are replaced must be Scrapped.
- c. Eligible Ferries and/or Tugs may be Repowered with any new Tier 3 or Tier 4 diesel or Alternate Fueled engines, or with All-Electric engines, or may be upgraded with an EPA Certified Remanufacture System or an EPA Verified Engine Upgrade.
- d. For Non-Government Owned Eligible Ferries and/or Tugs, Beneficiaries may only draw funds from the Trust in the amount of:
 1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine(s), including the costs of installation of such engine(s).
 2. Up to 75% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).

- e. For Government Owned Eligible Ferries and/or Tugs, Beneficiaries may draw funds from the Trust in the amount of:
 - 1. Up to 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine(s), including the costs of installation of such engine(s).
 - 2. Up to 100% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).

5. Ocean Going Vessels (OGV) Shorepower

- a. Eligible Marine Shorepower includes systems that enable a compatible vessel's main and auxiliary engines to remain off while the vessel is at berth. Components of such systems eligible for reimbursement are limited to cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution. Marine shore power systems must comply with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems) and should be supplied with power sourced from the local utility grid. Eligible Marine Shorepower includes equipment for vessels that operate within the Great Lakes.
- b. For Non-Government Owned Marine Shorepower, Beneficiaries may only draw funds from the Trust in the amount of up to 25% for the costs associated with the shore-side system, including cables, cable management systems, shore power coupler systems, distribution control systems, installation, and power distribution components.
- c. For Government Owned Marine Shorepower, Beneficiaries may draw funds from the Trust in the amount of up to 100% for the costs associated with the shore-side system, including cables, cable management systems, shore power coupler systems, distribution control systems, installation, and power distribution components.

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

- a. Eligible Medium Trucks include 1992-2009 engine model year class 4-7 Local Freight trucks, and for Beneficiaries that have State regulations that already require upgrades to 1992-2009 engine model year trucks at the time of the proposed Eligible Mitigation Action, Eligible Trucks shall also include 2010-2012 engine model year class 4-7 Local Freight trucks.
- b. Eligible Medium Trucks must be Scrapped.

- 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 engine model year in which the Eligible Medium Trucks Mitigation Action occurs or one engine model year prior.
- d. For Non-Government Owned Eligible Medium Trucks, Beneficiaries may draw funds from the Trust in the amount of:
 - 1. Up to 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. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
 - 3. Up to 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. Up to 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, Beneficiaries may draw funds from the Trust in the amount of:
 - 1. Up to 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. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
 - 3. Up to 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. Up to 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

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 3 g/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.
- d. For Non-Government Owned Eligible Airport Ground Support Equipment, Beneficiaries may only draw funds from the Trust in the amount of:
 - 1. Up to 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. Up to 75% 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.
- e. For Government Owned Eligible Airport Ground Support Equipment, Beneficiaries may draw funds from the Trust in the amount of:
 - 1. Up to 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. Up to 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.

8. Forklifts and Port Cargo Handling Equipment

- a. Eligible Forklifts includes forklifts with greater than 8000 pounds lift capacity.
- b. Eligible Forklifts and Port Cargo Handling Equipment must be Scrapped.
- c. Eligible Forklifts and Port Cargo Handling Equipment may be Repowered with an All-Electric engine, or may be replaced with the same equipment in an All-Electric form.
- d. For Non-Government Owned Eligible Forklifts and Port Cargo Handling Equipment, Beneficiaries may draw funds from the Trust in the amount of:
 - 1. Up to 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. Up to 75% of the cost of a new All-Electric Forklift or Port Cargo Handling Equipment, including charging infrastructure associated with such new All-Electric Forklift or Port Cargo Handling Equipment.
- e. For Government Owned Eligible Forklifts and Port Cargo Handling Equipment, Beneficiaries may draw funds from the Trust in the amount of:

1. Up to 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. Up to 100% of the cost of a new All-Electric Forklift or Port Cargo Handling Equipment, including charging infrastructure associated with such new All-Electric Forklift or Port Cargo Handling Equipment.
9. Light Duty Zero Emission Vehicle Supply Equipment. Each Beneficiary may use up to fifteen percent (15%) of its allocation of Trust Funds on the costs 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).
- a. Light duty electric vehicle 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 vehicle supply equipment (i.e., not located at a private residential dwelling that is not a multi-unit dwelling).
 - b. Light duty hydrogen fuel cell vehicle supply equipment includes hydrogen dispensing equipment capable of dispensing hydrogen at a pressure of 70 megapascals (MPa) (or analogous successor technologies) that is located in a public place.
 - c. Subject to the 15% limitation above, each Beneficiary may draw funds from the Trust in the amount of:
 1. Up to 100% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that will be available to the public at a Government Owned Property.
 2. Up to 80% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that will be available to the public at a Non-Government Owned Property.
 3. Up to 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. Up to 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.

5. Up to 33% of the cost to purchase, install and maintain eligible light duty hydrogen fuel cell vehicle supply equipment capable of dispensing at least 250 kg/day that will be available to the public.
 6. Up to 25% of the cost to purchase, install and maintain eligible light duty hydrogen fuel cell vehicle supply equipment capable of dispensing at least 100 kg/day that will be available to the public.
10. Diesel Emission Reduction Act (DERA) Option. Beneficiaries may use Trust Funds for their non-federal voluntary match, 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), or Section 792 (codified at 42 U.S.C. § 16132) in the case of Tribes, thereby allowing Beneficiaries to use such Trust Funds for actions not specifically enumerated in this Appendix D-2, but otherwise eligible under DERA pursuant to all DERA guidance documents available through the EPA. Trust Funds shall not be used to meet the non-federal mandatory cost share requirements, as defined in applicable DERA program guidance, of any DERA grant.

Eligible Mitigation Action Administrative Expenditures

For any Eligible Mitigation Action, Beneficiaries may use Trust Funds for actual administrative expenditures (described below) associated with implementing such Eligible Mitigation Action, but not to exceed 15% of the total cost of such Eligible Mitigation Action. The 15% cap includes the aggregated amount of eligible administrative expenditures incurred by the Beneficiary and any third-party contractor(s).

1. Personnel including costs of employee salaries and wages, but not consultants.
2. Fringe Benefits including costs of employee fringe benefits such as health insurance, FICA, retirement, life insurance, and payroll taxes.
3. Travel including costs of Mitigation Action-related travel by program staff, but does not include consultant travel.
4. Supplies including tangible property purchased in support of the Mitigation Action that will be expensed on the Statement of Activities, such as educational publications, office supplies, etc. Identify general categories of supplies and their Mitigation Action costs.
5. Contractual including all contracted services and goods except for those charged under other categories such as supplies, construction, etc. Contracts for evaluation and consulting services and contracts with sub-recipient organizations are included.
6. Construction including costs associated with ordinary or normal rearrangement and alteration of facilities.
7. Other costs including insurance, professional services, occupancy and equipment leases, printing and publication, training, indirect costs, and accounting.

Definitions/Glossary of Terms

“Airport Ground Support Equipment” shall mean vehicles and equipment used at an airport to service aircraft between flights.

“All-Electric” shall mean powered exclusively by electricity provided by a battery, fuel cell, or the grid.

“Alternate Fueled” shall mean an engine, or a vehicle or piece of equipment that is powered by an engine, which uses a fuel different from or in addition to gasoline fuel or diesel fuel (e.g., CNG, propane, diesel-electric Hybrid).

“Certified Remanufacture System or Verified Engine Upgrade” shall mean engine upgrades certified or verified by EPA or CARB to achieve a reduction in emissions.

“Class 4-7 Local Freight Trucks (Medium Trucks)” shall mean trucks, including commercial trucks, used to deliver cargo and freight (e.g., courier services, delivery trucks, box trucks moving freight, waste haulers, dump trucks, concrete mixers) with a Gross Vehicle Weight Rating (GVWR) between 14,001 and 33,000 lbs.

“Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Buses)” shall mean vehicles with a Gross Vehicle Weight Rating (GVWR) greater than 14,001 lbs. used for transporting people. See definition for School Bus below.

“Class 8 Local Freight, and Port Drayage Trucks (Eligible Large Trucks)” shall mean trucks with a Gross Vehicle Weight Rating (GVWR) greater than 33,000 lbs. used for port drayage and/or freight/cargo delivery (including waste haulers, dump trucks, concrete mixers).

“CNG” shall mean Compressed Natural Gas.

“Drayage Trucks” shall mean trucks hauling cargo to and from ports and intermodal rail yards.

“Forklift” shall mean nonroad equipment used to lift and move materials short distances; generally includes tines to lift objects. Eligible types of forklifts include reach stackers, side loaders, and top loaders.

“Freight Switcher” shall mean a locomotive that moves rail cars around a rail yard as compared to a line-haul engine that moves freight long distances.

“Generator Set” shall mean a switcher locomotive equipped with multiple engines that can turn off one or more engines to reduce emissions and save fuel depending on the load it is moving.

“Government” shall mean a State or local government agency (including a school district, municipality, city, county, special district, transit district, joint powers authority, or port authority, owning fleets purchased with government funds), and a tribal government or native village. The term “State” means the several States, the District of Columbia, and the Commonwealth of Puerto Rico.

“Gross Vehicle Weight Rating (GVWR)” shall mean the maximum weight of the vehicle, as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo.

- Class 1: < 6000 lb.
- Class 2: 6001-10,000 lb.
- Class 3: 10,001-14,000 lb.
- Class 4: 14,001-16,000 lb.
- Class 5: 16,001-19,500 lb.
- Class 6: 19,501-26,000 lb.
- Class 7: 26,001-33,000 lb.
- Class 8: > 33,001 lb.

“Hybrid” shall mean a vehicle that combines an internal combustion engine with a battery and electric motor.

“Infrastructure” shall mean the equipment used to enable the use of electric powered vehicles (e.g., electric vehicle charging station).

“Intermodal Rail Yard” shall mean a rail facility in which cargo is transferred from drayage truck to train or vice-versa.

“Port Cargo Handling Equipment” shall mean rubber-tired gantry cranes, straddle carriers, shuttle carriers, and terminal tractors, including yard hostlers and yard tractors that operate within ports.

“Plug-in Hybrid Electric Vehicle (PHEV)” shall mean a vehicle that is similar to a Hybrid but is equipped with a larger, more advanced battery that allows the vehicle to be plugged in and recharged in addition to refueling with gasoline. This larger battery allows the car to be driven on a combination of electric and gasoline fuels.

“Repower” shall mean to replace an existing engine with a newer, cleaner engine or power source that is certified by EPA and, if applicable, CARB, to meet a more stringent set of engine emission standards. Repower includes, but is not limited to, diesel engine replacement with an engine certified for use with diesel or a clean alternate fuel, diesel engine replacement with an electric power source (e.g., grid, battery), diesel engine replacement with a fuel cell, diesel engine replacement with an electric generator(s) (genset), diesel engine upgrades in Ferries/Tugs with an EPA Certified Remanufacture System, and/or diesel engine upgrades in Ferries/Tugs with an EPA Verified Engine Upgrade. All-Electric and fuel cell Repowers do not require EPA or CARB certification.

“School Bus” shall mean a Class 4-8 bus sold or introduced into interstate commerce for purposes that include carrying students to and from school or related events. May be Type A-D.

“Scrapped” shall mean to render inoperable and available for recycle, and, at a minimum, to specifically cut a 3-inch hole in the engine block for all engines. If any Eligible Vehicle will be replaced as part of an Eligible project, Scrapped shall also include the disabling of the chassis by cutting the vehicle’s frame rails completely in half.

“Tier 0, 1, 2, 3, 4” shall refer to corresponding EPA engine emission classifications for nonroad, locomotive, and marine engines.

“Tugs” shall mean dedicated vessels that push or pull other vessels in ports, harbors, and inland waterways (e.g., tugboats and towboats).

“Zero Emission Vehicle (ZEV)” shall mean a vehicle that produces no emissions from the on-board source of power (e.g., All-Electric or hydrogen fuel cell vehicles).