State of Mississippi Volkswagen Environmental Mitigation Program

PROJECT APPLICATION



MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

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Application Release Date: June 11, 2021

Application Submittal Deadline: October 29, 2021

INTRODUCTION

This funding opportunity is a reimbursement program for qualifying projects under the State of Mississippi Volkswagen Environmental Mitigation Program. This application package outlines the process of applying for funding from MDEQ to implement nitrogen oxides (NOx) emissions reduction projects in Mississippi. The package contains information on the background of the program, the entities and projects eligible for funding, as well as the required application content and procedures. The project selection process, a timeline of for administering the grant, and other details regarding project requirements are also included in this package. If you would like more information about Mississippi's use of the Volkswagen Environmental Mitigation Trust Fund allocation or have questions about this application package, please contact Chuck Rainey at (601) 961-5536 or Stephen Barnett at (601) 961-5276.

BACKGROUND

The Volkswagen Environmental Mitigation Trust Fund was established as a result of a settlement agreement between Volkswagen and the US Government regarding claims that Volkswagen sold diesel powered vehicles equipped with "defeat devices" designed to cheat emissions tests, which resulted in the release of excess NOx emissions to the air. Monies from the fund were allocated to states to fund eligible environmental mitigation projects that would reduce NOx emissions from the transportation sector. The governor of Mississippi identified MDEQ as the lead agency for the State of Mississippi to distribute funds for eligible mitigation actions.

The list of eligible projects is predominantly focused on the reduction of diesel emissions, which are a large contributor of NOx emissions. Reducing diesel emissions is currently one of the most important air quality challenges in Mississippi. Although more stringent emission standards have taken effect for new, heavy-duty, on-road and non-road engines, older diesel engines still in use will continue to emit large amounts of nitrogen oxides and particulate matter for years to come. These pollutants affect many areas in our state and hinder our ability to comply with National Ambient Air Quality Standards, but most importantly, they contribute to public health problems.

REQUEST FOR PROPOSALS

The Mississippi Department of Environmental Quality (MDEQ) invites universities, private organizations, non-profit organizations, businesses, and any county, city, state, or other local government in Mississippi to submit applications for the State of Mississippi Volkswagen Environmental Mitigation Program. The goal of this funding opportunity is to implement cost-effective and innovative projects to reduce NOx emissions in the state of Mississippi.

IMPORTANT INFORMATION FOR APPLICANTS

Program Timeline:

Month/Year	Task
June 11, 2021	Application Release
October 29, 2021	Project Submittal Deadline
November 30, 2021	Complete Project Selection by Review Committee
January 15, 2022	Announcement of Project Selection
Two Years from Execution of Grant Agreement	Projects Completed
Up to 45 Days from Project Completion	Final Report and Invoices Due

Application Requirements:

The following requirements must be met by all applicants:

- <u>Complete</u> applications must be received by 5:00 p.m. Central Time on Friday, October 29, 2021. Applications received after this deadline will not be accepted for any reason.
- The submission of an application does not constitute an award. MDEQ reserves the right to accept, reject, or negotiate any or all applications received. The final decision to award funds rests solely with MDEQ.
- Applicants may only apply for funding of projects that reduce NOx emissions and are eligible pursuant to the Volkswagen Settlement Environmental Mitigation Trust Agreement, as described in the **PROJECT ELIGIBILITY AND REIMBURSEMENT RATES** section of this application package.
- Applicants must provide a detailed description of the proposed project, detailed timeline, and detailed budget, including the total amount of funds requested. Also, applicants must include the amount of any matching funds, whether from an outside source or in-kind funds, if applicable. Additional details regarding the information required for a complete application can be found in the **APPLICATION CONTENT** section of this application package.

Selected Projects:

The following applies to all projects selected for funding¹:

- For projects awarded only partial funding, awardee may be required to submit a revised application.
- Projects may not begin prior to full execution of a grant agreement. Funds expended prior to execution of a grant agreement are not eligible for reimbursement.
- Projects must be completed within two years from execution of a grant agreement. MDEQ will only reimburse work completed during this two-year period.
- Reimbursement will occur at the end of project work (e.g., after purchase and installation of new equipment and appropriate disposal of replaced technology). Copies of paid invoice(s) for new equipment and installation, if applicable, are required for reimbursement processing.
- Awardees will be reimbursed after MDEQ verifies project completion. Invoices may require up to 45 days for payment.
- Awardees must demonstrate that all vendors were selected in accordance with the State of Mississippi public contracting laws, as applicable.
- If your project is for a Certified Engine Repower or a Vehicle/Equipment Replacement, evidence of appropriate disposal is required in order to be reimbursed. At a minimum, any engine being replaced as part of an eligible project must be scrapped by cutting a 3-inch hole in the engine block. Any eligible vehicle that will be replaced as part of an eligible project must be scrapped by disabling the chassis by cutting the vehicle's frame rails completely in half.
- Awardee must submit mid-term progress reports and any additional progress reports requested by MDEQ.

¹Nothing contained in this application package is intended to supersede the terms and conditions of any grant agreement entered into for project administration purposes.

PROJECT SELECTION PROCESS

MDEQ will award funds on a competitive basis and will only consider complete applications submitted by the submission deadline. A review committee consisting of MDEQ staff will review proposals. The committee will assign points to each proposal based on the criteria listed below. Project proposals will be ranked according to the total points received, with the more points received resulting in a higher ranking. MDEQ will make funding determinations according to such ranking.

Evaluating Criteria:

Higher point values are assigned to projects that provide greater environmental benefits.

- 1. Amount of matching funds provided by applicant *exceeding the required cost-share*, including in-kind contributions, to assist in the overall cost of the project. (Point Value: 0-15)
- 2. Expected emissions reductions over the expected life of the project and other environmental benefits. (Point Value: 0-35)
- 3. The cost-effectiveness (i.e., reducing the most emissions for the least amount of money) of the project. (Point Value: 0-20)
- 4. The location of the project. Greater weight will be given to projects in areas where nitrogen dioxide (NO₂), ozone (O₃), or fine particulate matter (PM_{2.5})² are above or near their applicable National Ambient Air Quality Standards (NAAQS). (Point Value: 0-10)
- 5. Projects that employ alternative energy sources (natural gas, propane, electric). (Point Value 0-20)

 $^{^{2}}$ The projects being funded will target the reduction of NO_x, which contributes to the formation of the NAAQS criteria pollutants NO₂, O₃, and PM_{2.5}.

PROJECT ELIGIBILITY AND REIMBURSEMENT RATES

Eligible Fleets and Equipment:

Funding is available to governmental³ and non-governmental entities in the state of Mississippi for projects in any of the ten Eligible Mitigation Action (EMA) categories of the Volkswagen Settlement Environmental Mitigation Trust Agreement, including the DERA Option. Descriptions of the EMA categories are as follows:

<u>Category 1 – Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)</u>

Eligible Large Trucks include 1992-2009 engine model year Class 8 local freight or drayage.

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

Eligible Buses include 2009 engine model year or older Class 4-8 school buses, shuttle buses, or transit buses.

Category 3 – Freight Switchers

Eligible Freight Switchers include pre-Tier 4 switcher locomotives that operate 1,000 or more hours per year.

Category 4 - Ferries/Tugs

Eligible Ferries and/or Tugs include unregulated, Tier 1, or Tier 2 marine engines.

Category 5 - Ocean Going Vessels (OGV) Shorepower

Eligible Marine Shorepower includes systems that enable a compatible vessel's main and auxiliary engines to remain off while the vessel is at berth.

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

Eligible Medium Trucks include 1992-2009 engine model year Class 4-7 local freight trucks.

Category 7 - Airport Ground Support Equipment

Eligible Airport Ground Support Equipment includes:

1. Tier 0, Tier 1, or Tier 2 diesel-powered airport ground support equipment; and

³ "Governmental" means 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.

2. Uncertified, or certified to 3 g/bhp-hr or higher emissions, spark ignition engine powered airport ground support equipment.

Category 8 - Forklifts and Port Cargo Handling Equipment

Eligible Forklifts includes forklifts with greater than 8,000 pounds lift capacity.

Category 9 - Light Duty Zero Emission Vehicle Supply Equipment

Light duty electric vehicle and hydrogen fuel cell supply equipment.

Category 10 - DERA Option

For actions not specifically enumerated, but otherwise eligible under DERA, pursuant to all DERA guidance documents available through the EPA.

Additional details regarding eligible projects and the complete list of Eligible Mitigation Actions and definitions, as outlined in Appendix D-2 of the Trust Agreement, are included in this application package as Appendix A. The maximum reimbursement rates listed in Appendix A are those allowed by the Trust Agreement. Mississippi has exercised its authority to reduce those rates, therefore, they are not the same reimbursement rates as those allowed under the State of Mississippi's program. Refer to Table 1 for the maximum reimbursement rates applicable to this program.

Reimbursement Rates:

Table 1, shown on the following pages, describes the projects eligible for funding and the maximum percentage of project cost available for reimbursement under this grant. Selected projects may be funded at rates less than the maximums listed.

Eligible Mitigation Action Category	Project Description	Maximum Funding Percentage from Mississippi DEQ	
		Non-Government Project	Government Project
Category 1: Class 8 Local Freight Trucks	Repower w/ new diesel or alternative fuel engine	40%	60%
	Replacement w/ new diesel or alternative fuel vehicle	25%	60%
	Repower w/ new all- electric engine	60%	70%
	Replacement w/ new all-electric vehicle	60%	70%
Category 1: Drayage Trucks	Repower w/ new diesel or alternative fuel engine	40%	60%
	Replacement w/ new diesel or alternative fuel vehicle	50%	60%
	Repower w/ new all- electric engine	60%	70%
	Replacement w/ new all-electric vehicle	60%	70%
Category 2: Class 4-8 School Buses, Shuttle Buses, and Transit Buses	Repower w/ new diesel or alternative fuel engine	40%	60%
	Replacement w/ new diesel or alternative fuel vehicle	25%	60%
	Repower w/ new all- electric engine	60%	70%
	Replacement w/ new all-electric vehicle	60%	70%
Category 3: Freight Switchers	Repower w/ new diesel or alternative fuel engine or generator set	40%	60%
	Replacement w/ new diesel or alternative fuel freight switcher	25%	60%
	Repower w/ new all- electric engine/gen set	60%	70%
	Replacement w/ new all-electric freight switcher	60%	70%

Table 1: Eligible Projects and Maximum Reimbursement Rates

Category 4:	Repower w/ new diesel		
Ferries/Tugs	or alternative fuel	40%	60%
	engine		
	Repower w/ new all-	60%	60%
	electric engine	0078	0078
Category 5: Ocean	Purchase of shore-side		
Going Vessel	system equipment (e.g.	25%	60%
Shorepower	cables, power couplers)		
Category 6: Class 4-7	Repower w/ new diesel		
Local Freight Trucks	or alternative fuel	40%	60%
	engine		
	Replacement w/ new		
	diesel or alternative	25%	60%
	fuel vehicle	_0//	
	Repower w/ new all-		
	electric engine	60%	70%
	Replacement w/ new		
	all-electric vehicle	60%	70%
Category 7: Airport	Repower w/ new all-		
Ground Support	electric engine	60%	70%
Equipment	Replacement w/ new		
Equipment	all-electric airport		
	ground support	60%	70%
	equipment		
Category 8: Forklifts	Repower w/ new all-		
and Port Cargo	electric engine	60%	70%
Handling Equipment			
	Replacement w/ new all-electric		
	forklift/handling	60%	70%
Catagam (0, Light	equipment		
Category 9: Light	Purchase/maintenance		
Duty Zero Emission	for ZEV supply	60%	70%
Vehicle Supply	equipment available to		
Equipment	public		
	ZEV supply equipment	<u> </u>	0/
	available at a	60	1%
	workplace, not public		
	ZEV supply equipment		
	available at a multi-unit	60	1%
	dwelling, not public		
	Hydrogen fuel-cell		
	supply equipment	33	5%
	(>250 kg/day), public		
	Hydrogen fuel-cell		
	supply equipment	25	5%
	(>100 kg/day), public		
Category 10: DERA	See DERA guidance for allowable projects and reimbursement rates.		
Option			

APPLICATION CONTENT

The application **must** include the following information:

- 1. Application Cover Sheet (See p. 10 of this application package.)
- 2. A detailed project description⁴ which **must** include:
 - the particular type of fleet(s)/vehicle(s) (e.g. marine vessels, buses, medium-duty or heavy-duty trucks, locomotive, or any non-road engine or vehicle used in construction, handling of cargo, agriculture, mining, or energy production) involved in the project;
 - the technology proposed to be implemented (i.e., certified engine configurations, verified technologies, engine repower/vehicle replacement or emerging technologies);
 - any partners involved and their contribution; and
 - a description of how this project meets the overall goal of reducing NOx emissions and by what means.
- 3. A detailed budget of the proposed project funding, including the total amount of funds requested and any matching funds or in-kind contributions.
- 4. Emissions reductions quantified using EPA's Diesel Emissions Quantifier (DEQ). (If you need assistance using the DEQ, contact Chuck Rainey, at 601-961-5536 or crainey@mdeq.ms.gov, or Stephen Barnett, at 601-961-5276 or sbarnett@mdeq.ms.gov.)
- 5. A description of how the proposal addresses each of the evaluating criteria listed in the **PROJECT SELECTION PROCESS** section of this application package.
- 6. A detailed timeline or schedule of the project, including the length of time expected to complete each task or phase.
- 7. Letter(s) of support or commitment from any project partners or other source of matching funds or in-kind contributions, if applicable.

⁴This portion of the application should include a more detailed description of the project than was provided in the "Project Summary" section of the Application Cover Sheet.

State of Mississippi Volkswagen Environmental Mitigation Program Application Cover Sheet				
Project Title:				
Project Manager:				
Organization/Business Name:				
Organization Type (circle one):	Government	Non-Government		
Mailing Address:				
City:	County:	Zip:		
Telephone:		Fax:		
E-Mail:				
Alternative Contact Telephone:		Iternative Contact -Mail:		
Amount Requested:				
Amount of Matching Funds: Capital	\$	In-kind		
Project Summary:				
Signature of Authorized Represent this application. Unsigned application		fies authority to represent this organization in .)		
Print Name		Title		
Signature		Date		
Please attach this page to the front o	of your application. Tha	nk you.		

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Instructions for Completing the State of Mississippi Volkswagen Environmental Mitigation Program Application Cover Sheet

Title of Form: State of Mississippi Volkswagen Environmental Mitigation Program Application Cover Sheet

Purpose of the form: The purpose of this form is to help administer the Volkswagen Environmental Mitigation Funds for the State of Mississippi, in order to reduce NOx emissions for the improvement of air quality.

Who will complete the form: The organization/business who wishes to submit an application for a project to MDEQ.

Item-by-item instructions for completing the form:

Project Title – Name that the project will be called.

Project Manager - Name of the person who is the primary contact and developer of the project.

Organization/Business name – Name of the entity that is submitting the application.

Please circle the *Organization type*. "*Government*" means 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) or a tribal government or native village.

Mailing Address – Address of Organization/Business submitting the application including the City, County, and Zip

Telephone, Fax, and Email – Project manager's telephone number, fax number, and email.

Alternate Contact Person – Name of an alternate contact for the project.

Alternate Contact Telephone – Phone number of alternate contact person.

Alternate Contact Email – Email of alternate contact person.

Amount Requested – Amount of money requested by entity to complete the proposed project, not including matching funds.

Amount of Matching Funds – Capital is money that will be directly used to assist in paying for a project. *In-kind* funds can be services performed or other contributions that assist in the implementation of a project, not just the direct expenditure of funds.

Project Summary – Please provide a short description of the proposed project, including what emission reduction strategies involved and any partners included.

Signature of Authorized Representative – Must be signed by someone who has the authority to represent this organization and dated.

SUBMITTAL INSTRUCTIONS

- Applications may be submitted electronically, by mail, **or** via hand delivery.
- One electronic copy or three hard copies (two-sided preferred) must be received by MDEQ no later than **5 p.m. Central Time on Friday, October 29, 2021.** <u>Applications received after this deadline will</u> <u>not be accepted for any reason.</u>
- Postmark dates will not be taken into consideration.
- Applications must be signed.
- All application requirements must be met. Incomplete applications will not be considered.

Option #1 - Electronic submittals should be e-mailed to MSVWSettlement@mdeq.ms.gov

Option #2 - Hard copies should be **mailed or hand delivered to:** Mississippi Department of Environmental Quality Attn: Chuck Rainey Air Division Post Office Box 2261 Jackson, MS 39225

Contact: Chuck Rainey at (601) 961-5536 or Stephen Barnett at (601) 961-5276

STATE OF MISSISSIPPI VOLKSWAGEN ENVIRONMENTAL MITIGATION PROGRAM APPLICATION CHECKLIST

- 2. Detailed budget of proposed project funding (including matching/inkind funds)
- 3. Detailed project description (see p. 9)
- 5. Description of how the proposal addresses each of the evaluating criteria (see p. 4)
- 6. Detailed timeline/schedule of proposed project
- 7. □ Letter(s) of support/commitment from any project partners or other source of matching funds or in-kind contributions (if applicable)

APPENDIX A: ELIGIBLE MITIGATION ACTIONS AND EXPENDITURES ALLOWED BY THE VOLKSWAGEN SETTLEMENT TRUST AGREEMENT AND INCLUDED THEREIN AS APPENDIX D-2

- 1. <u>Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)</u>
 - 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) 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.
- a. 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.
- b. 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.
- c. For Government Owned Eligible Airport Ground Support Equipment, Beneficiaries may draw funds from the Trust in the amount of:
 - 3. 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.
 - 4. 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. <u>Light Duty Zero Emission Vehicle Supply Equipment</u>. 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. <u>Diesel Emission Reduction Act (DERA) Option</u>. 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 nonfederal mandatory cost share requirements, as defined in applicable DERA program guidance, of any DERA grant.

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)" means vehicles with a GVWR greater than 14,001 lbs used for transporting people.

"*Class 8 Local Freight and Port Drayage Trucks*" means trucks with a GVWR greater than 33,000 lbs used for port drayage and/or freight/cargo delivery, including waste haulers, dump trucks, and concrete *mixers*.

"Drayage Trucks" means trucks hauling cargo to and from ports and intermodal rail yards.

"*Forklift*" means non-road equipment used to lift and move materials short distances, and generally include tines to lift objects. Eligible types of forklifts include reach stackers, side loaders, and top loaders.

"Freight Switcher" means a locomotive that moves rail cars around a rail yard as compared to a linehaul engine that *move* freight long distances.

"Generator Set" means 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*" means 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.

"Gross Vehicle Weight Rating (GVWR)" means the maximum weight of the vehicle, as specified by the manufacturer. GVWR include the following total vehicle weight plus fluids, passengers, and cargo:

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

"Hybrid" means a vehicle that *combines* an internal combustion engine with a battery and electric motor.

"*Infrastructure*" means the equipment used to enable the use of electric powered vehicles (e.g., electric charging stations).

"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 onboard source of power (e.g., All-Electric or hydrogen fuel cell vehicles).