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Massachusetts Volkswagen Open Solicitation: Application Guidance and Grant Requirements

January 2019

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Massachusetts VW Open Solicitation Grant Application Guidance

Background

In 2015, enforcement actions against Volkswagen (VW) and its subsidiaries¹ were initiated after it was discovered that VW illegally installed defeat devices in millions of Volkswagen, Audi and Porsche diesel vehicles worldwide², causing these vehicles to emit higher-than-allowed amounts of nitrogen oxides (NO_x). The settlement of the enforcement actions led to the creation of the *Volkswagen Diesel Emissions Environmental Mitigation Trust for State Beneficiaries, Puerto Rico and the District of Columbia* (VW Trust) to fund actions that mitigate the excess NO_x emissions. The Commonwealth of Massachusetts has been allocated approximately \$75 million of these Trust funds, and the Massachusetts Department of Environmental Protection (MassDEP) was designated the lead agency to administer the funds on behalf of the Commonwealth.

As part of its Phase One expenditure of the funding, MassDEP is offering this \$7.5 million VW Open Solicitation to public and private entities to fund eligible projects that will reduce the excess NO_x emissions. The VW Open Solicitation reflects the goals of the *Massachusetts Volkswagen Settlement Beneficiary Mitigation Plan* (BMP)³ released by MassDEP on December 7, 2018, which established the Commonwealth's plan for investing the funds to achieve better air quality, cleaner transportation, and healthier communities across the state.

How to Apply

This is a competitive grant application process. **Completed grant applications must be received no later than 5:00 p.m., March 18, 2019.** Any applications submitted after this date will not be considered. To apply for funding under this VW Open Solicitation, applicants must complete and submit:

1. [Project Application Form](#)
 - a. Applicants must use this form to provide contact information, describe the proposed project, and explain how it meets selection criteria outlined later in this document.
2. [Vehicle/Engine Data Form](#) spreadsheet
 - a. Applicants must use this form to list existing and requested equipment information, including estimated emissions reductions, and estimated costs.
 - b. Applicants must submit the completed *Vehicle/Engine Data Form* as an Excel spreadsheet, not a scanned or PDF version.

MassDEP highly encourages applications to be submitted online at https://massgov.formstack.com/forms/vw_open_solicitation_application; however, those needing the application in an alternate format should email vw.settlement@mass.gov or call Haidee Janak at 617-556-1138.

MassDEP may contact the applicant for clarification and/or supplemental information. Applicants will have 10 calendar days to respond to any such request; otherwise, their grant application will not be considered by MassDEP. MassDEP will evaluate and select projects

¹ Volkswagen AG, Audi AG, Porsche Cars of North America, Inc., Volkswagen Group of America, Inc., Volkswagen Group of America Chattanooga Operations, LLC Dr. Ing. h.c. F. Porsche AG, and Porsche Cars North America, Inc.

² VW installed the devices in over 11 million vehicles worldwide, including 590,000 in the U.S. and over 14,000 in Massachusetts.

³ <https://www.mass.gov/media/1882436>

based on a complete grant application, including any requested clarifying or supplemental information.

The submission of an application does not constitute an award or guarantee funding. Vehicles/switchers/non-road equipment and/or engines must not be ordered until the grantee receives an approval letter from MassDEP. MassDEP reserves the right not to award grant funding for the entire \$7.5 million offered under this VW Open Solicitation, and to grant only a portion of the maximum allowable funds per type of project.

If you have questions about this application, please contact MassDEP at vw.settlement@mass.gov no later than 5 p.m. March 4, 2019. MassDEP will post written responses to substantive questions 10 days before the application deadline.

Who Can Apply

This VW Open Solicitation is open to any person or entity that owns one or more eligible diesel-powered vehicle, locomotive switcher, marine vessel or non-road equipment that operates in Massachusetts, as further specified in the following section, *Eligible Projects*. In addition, those owning gasoline-powered airport ground support equipment (GSE) that operates in Massachusetts may also apply in this VW Open Solicitation.

Eligible Projects

The VW Trust Agreement specifies ten Eligible Mitigation Actions (EMAs) that states can fund to mitigate the effects of the illegal NOx emissions. Under this \$7.5 million VW Open Solicitation MassDEP is seeking applications for EMAs 1 through 8. **This VW Open Solicitation does not include EMA 9 (EVSE) or EMA 10 (DERA)**, but includes more information on these EMAs below.

Eligible projects must meet the engine model year, usage, emission tier and other requirements of each EMA listed below:

- **EMA 1 – Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)**
Eligible Large Trucks include 1992-2009 engine model year diesel-powered freight or drayage trucks weighing 33,001 pounds or more that have been operating primarily in the Commonwealth (i.e., at least half of its operating time/mileage) for at least the last 2 years. Eligible large trucks also include waste haulers, dump trucks, and concrete mixers.
- **EMA 2 – Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)**
Eligible Buses include 2009 engine model year or older diesel-powered school, shuttle, or transit buses weighing 14,001 pounds or more that are used to transport people and that have been operating primarily in the Commonwealth (i.e., at least half of its operating time/mileage) for at least the last 2 years.
- **EMA 3 – Freight Switchers**
Eligible Freight Switchers include pre-Tier 4 diesel-powered switcher locomotives that operate 1,000 or more hours per year in the Commonwealth and move rail cars around a rail yard.

- **EMA 4 – Ferries/Tugs**
Eligible Ferries and/or Tugs include unregulated, Tier 1, or Tier 2 diesel-powered marine engines that have been registered in the Commonwealth for at least the last 2 years. Tugs are dedicated vessels that push or pull other vessels in ports, harbors, and inland waterways (e.g., tugboats and towboats).
- **EMA 5 – Ocean Going Vessels (OGV) Shorepower**
Eligible OGV Shorepower includes systems that enable a compatible vessel's main and auxiliary engines to remain off while the vessel is at berth. 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.
- **EMA 6 – Class 4-7 Local Freight Trucks (Eligible Medium Trucks)**
Eligible Medium Trucks include 1992-2009 engine model year diesel-powered trucks used to deliver cargo and freight weighing between 14,001 to 33,000 pounds that have been operating primarily in the Commonwealth (i.e., at least half of its operating time/mileage) for at least the last 2 years. Examples include courier services, delivery trucks, box trucks moving freight, waste haulers, dump trucks, and concrete mixers.
- **EMA 7 – Airport Ground Support Equipment (GSE)**
Eligible Airport GSE pertains to vehicles and equipment that are used at an airport to service aircraft between flights and that have been operating primarily in the Commonwealth (i.e., at least half of its operating time/mileage) for at least the last 2 years and includes:
 - Emission Tier 0, Tier 1, or Tier 2 diesel-powered airport GSE; and
 - Uncertified, or certified to 3 grams/bhp-hr or higher emissions, gasoline spark ignition engine-powered airport GSE.
- **EMA 8 – Forklifts and Port Cargo Handling Equipment (CHE)**
Eligible Forklifts includes forklifts with greater than 8,000 pounds lift capacity used to lift and move materials short distances, generally with tines to lift objects, that have been operating primarily in the Commonwealth (i.e., at least half of its operating time/mileage) for at least the last 2 years. Eligible Forklifts include reach stackers, side loaders, and top loaders. Eligible Port CHE includes rubber-tired gantry cranes, straddle carriers, shuttle carriers, and terminal tractors, including yard hostlers and yard tractors that operate within ports.

Light Duty Zero Emission Electric Vehicle Supply Equipment (EVSE)

Applicants who want to apply for EMA 9, Light Duty Zero Emission EVSE, which is not funded under this VW Open Solicitation, should do so through the Massachusetts Electric Vehicle Incentive Program (MassEVIP). Please see the [MassDEP Air Quality Grants website](https://www.mass.gov/service-details/massdep-air-quality-grants-assistance)⁴ for more information.

⁴ <https://www.mass.gov/service-details/massdep-air-quality-grants-assistance>

Diesel Emissions Reduction Act (DERA)

Under the federal Diesel Emissions Reduction Act (DERA), the United States Environmental Protection Agency (EPA) accepts applications from and distributes funding to states annually for diesel emissions reduction projects. MassDEP has an ongoing DERA program, and a planned 2018 DERA Open Solicitation. Under the VW Settlement, states are allowed to use Settlement funding for DERA projects, provided they include that intention in their DERA work plans. MassDEP did not include this option in its 2018 DERA work plan, but may in the future. To help MassDEP evaluate whether, and, if so, how much, VW Settlement funding should be allocated to DERA in the future, a 'DERA (Informational Only)' tab is included in the *Vehicle/Engine Data Form*. Please fill out this tab if you expect to have DERA projects in the future.

Some examples of projects that would be eligible under DERA but not the other EMAs include engine retrofits, idle reduction technology, electrification of parking spaces at truck stops, and engine remanufacture for several engine groups. The VW DERA Option also allows states to fund projects on engines manufactured in additional model years than those specified for the other EMAs. A comparison of VW EMAs 1-9 and DERA eligible projects can be found at <https://www.epa.gov/cleandiesel/vw-settlement-dera-option-supporting-documents>. Applicants can also email Haidee Janak at haidee.janak@mass.gov with questions or requests to be notified when the next Massachusetts DERA grant solicitation opens.

Eligible Technology Options

The primary technology options for the eight EMAs available under this VW Open Solicitation include:

- Repowering (replacing) a diesel engine with a new diesel, alternate fuel (AF), or all-electric engine; and/or
- Replacing an entire vehicle or piece of diesel equipment with a new diesel, AF, or all-electric vehicle or piece of equipment.

AF options include compressed natural gas (CNG), propane, liquefied natural gas (LNG), liquefied petroleum gas (LPG) and other fuels different from or in addition to gasoline or diesel fuel such as a diesel electric hybrid. All electric engines are engines powered exclusively by electricity provided by a battery, fuel cell, or the grid, such as electric engines and hydrogen fuel cells.

EMA Funding Levels and Costs Covered

The maximum amount of VW Settlement Funds that MassDEP will allocate to an applicant is \$500,000. Funding levels for selected projects depend on the EMA, the fuel type of the new vehicle/switcher/non-road equipment and/or engine and whether the project is government⁵ (GOV) or non-government owned (NON-GOV). The tables below list the funding limits that MassDEP has established for the eight EMAs available under this VW Open Solicitation. All grant recipients are required to use non-VW sources to fund the remainder of their project's purchase and installation costs.

⁵ Appendix D-2 of the State Mitigation Trust defines "Government" as: *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.*

EMAs 1, 2 and 6 – Class 8 Local Freight Trucks and Port Drayage Trucks, Class 4-8 School, Shuttle, or Transit Buses, & Class 4-7 Local Freight Trucks

Technologies for EMAs 1, 2 and 6	Costs Covered	Allowed Funding %	
		GOV	NON-GOV
Repower w/new diesel or AF engine	Engine purchase and installation	80%	40%
Replace w/new diesel or AF vehicle	Vehicle purchase	80%	25% (50% for port drayage)
Repower w/new all-electric engine	Engine purchase and installation; purchase and installation of electric charging or fuel cell infrastructure (see Charging Infrastructure table below for more info)	80%	75%
Replace w/new all-electric vehicle	Vehicle purchase; purchase and installation of electric charging or fuel cell infrastructure (see Charging Infrastructure table below for more info)	80%	75%

Note that under EMA 2 pertaining to school buses, a privately-owned school bus company under contract with a public school district is viewed as a government entity under the VW Trust Agreement and can therefore obtain 80% in funding for a school bus project.

EMA 3 – Freight Switchers

Technologies for EMA 3	Costs Covered	Allowed Funding %	
		GOV	NON-GOV
Repower w/new diesel or AF engine and/or genset	Engine purchase and installation	80%	40%
Replace w/new diesel or AF switcher and/or genset	Switcher and/or genset purchase	80%	25%
Repower w/new all-electric engine and/or genset	Engine and/or genset purchase and installation; purchase and installation of electric charging or fuel cell infrastructure (see Charging Infrastructure table below for more info)	80%	75%
Replace w/new all-electric switcher and/or genset	Switcher and/or genset purchase; purchase and installation of electric charging or fuel cell infrastructure (see Charging Infrastructure table below for more info)	80%	75%

EMA 4 – Ferries and Tugs

Technologies for EMA 4	Costs Covered	Allowed Funding %	
		GOV	NON-GOV
Repower w/new Tier 3 or 4 diesel or AF engine	Engine purchase and installation	80%	40%
Diesel engine upgrade w/an EPA Certified Remanufacture System or Verified Engine Upgrade	Engine purchase and installation	80%	40%
Repower w/new all-electric engine	Engine purchase and installation; purchase and installation of electric charging or fuel cell infrastructure (see Charging Infrastructure table below for more info)	80%	75%

EMA 5 – Shorepower for Ocean Going Vessels (OGV)

Technology for EMA 5	Costs Covered	Allowed Funding %	
		GOV	NON-GOV
Shore-side system	Cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution	80%	25%

EMAs 7 and 8 – Airport Ground Support Equipment (GSE), and Forklifts and Port Cargo Handling Equipment (CHE)

Technologies for EMAs 7 and 8	Costs Covered	Allowed Funding %	
		GOV	NON-GOV
Repower w/new all-electric engine	Engine purchase and installation; purchase and installation of electric charging or fuel cell infrastructure (see Charging Infrastructure table below for more info)	80%	75%
Replace w/new all-electric equipment	Equipment purchase; purchase and installation of electric charging or fuel cell infrastructure (see Charging Infrastructure table below for more info)	80%	75%

Repowers: MassDEP will fund the following costs associated with an engine repower (pertains to all EMAs with an engine replacement option).

Equipment Costs COVERED	Labor Costs COVERED
<ul style="list-style-type: none"> • Gearboxes, structural foundations • Cooling system upgrades • Exhaust system upgrades • Engine electronics • Emissions control systems • Upgraded fuel system components 	<ul style="list-style-type: none"> • Removal of existing engine • Dry dock or yard time • Cutting access holes • Crane and rigging services • Shore power during repower • Bilge cleaning • Engine installation and alignment • Cooling and exhaust system pipe fitting • Emission control systems and wiring installation • Fabrication of new foundations for main engines and gearboxes

Charging Infrastructure: MassDEP will fund the electric charging infrastructure costs associated with EMAs 1-8 on the left side of the following table. MassDEP will not fund the costs on the right side.

Costs COVERED include:	Costs NOT COVERED include:
<ul style="list-style-type: none"> • A console wired into the electrical supply • A cable and connector to plug into the EV • Cable management strategy (e.g., coil, retractable, etc.) • Mounting, either pedestal or wall. Pedestal: hard-wired to a permanent pole or box. Wall: hard-wired to a wall and typically includes a mounting plate. • Separate payment module • Upgrading electric supply • Construction costs related to installation • Signage and pavement painting • Shipping/Freight 	<ul style="list-style-type: none"> • Land/parking space purchase or lease • Software subscription • Warranty • Taxes • Internet connection or cell signal • Planning or permitting for the project • Bollards, curbs, wheel stops, setbacks, bumper guards • Electricity consumption and demand charges • Preventative and corrective maintenance on Charging Infrastructure

Additionally, MassDEP will **NOT COVER** costs associated with the following:

- Taxes;
- Scrapage of the existing vehicle/switcher/non-road equipment or engine;
- Operation and maintenance costs of the new vehicle/switcher/non-road equipment or engine; or
- Fees of a third-party consultant, dealer or marine architect hired by the grant recipient to prepare plans for a repower (replacement) of an engine or to administer grant-funded activities, including submission of reports to MassDEP from the grant recipient.

Project Selection Criteria

Applicants must provide information in their grant application that specifically addresses the criteria below, where applicable, listed in no particular order of importance. While the criteria provided in this section are the primary means of determining whether to select a proposed project, in certain instances MassDEP reserves the right to also consider other factors not included in these criteria when making its final selection of projects for funding. To ensure the best possible consideration of your application, applicants must answer questions about how their project will:

- **Help the Commonwealth Reduce Air Pollution and Achieve GHG Emissions Reduction Targets in the Transportation Network** – MassDEP will evaluate projects' estimated emissions reductions as entered in the 'Emissions Reductions' tab of the *Vehicle/Engine Data Form*.
- **Promote Electrification of the Transportation Network** – MassDEP will consider whether the proposed project further electrifies the transportation network in Massachusetts.
- **Promote Advanced Technologies in the Transportation Network** – MassDEP will consider whether the proposed project promotes advanced technologies in the transportation network in Massachusetts.
- **Serve Environmental Justice (EJ) Populations** – Massachusetts seeks projects that provide environmental benefits and reduce environmental burdens in EJ areas in the Commonwealth.
- **Promote Equitable Geographic Distribution Across the State** – The Commonwealth seeks to promote the equitable distribution of funding across the state. Geographic areas are defined as the four [MassDEP Regional Service Areas](#).⁶
- **Yield Additional Benefits** – In reviewing proposed projects, MassDEP may consider additional factors, including, but not limited to:
 - a. the project's implementation timeline, including the level of project implementation detail and feasibility
 - b. whether the project operates in a densely populated area
 - c. whether the applicant commits to contributing more than the required cost share
 - d. whether the project involves unique or replicable technologies or policies (e.g., the applicant would be willing to share acquisition and testing processes, written policies, data collected on the use of a new technology, etc.)
 - e. the project's societal co-benefits, such as the promotion and support of public health, economic health and diversity, and other desirable outcomes
 - f. the project's cost effectiveness for the NO_x and/or CO₂ reductions achieved (comparatively lower dollars spent per ton of NO_x/CO₂ reduced)

⁶https://www.mass.gov/orgs/massachusetts-department-of-environmental-protection/locations?_page=1&page=1

General Procedures and Requirements of Grant Implementation

Technology Acquisition and Installation Process

- After grant recipient receives an approval letter from MassDEP, grant recipient and MassDEP must sign a *Commonwealth of Massachusetts - Standard Contract Form*. Other required documents include the *Commonwealth Terms and Conditions*, *Contractor Authorized Signatory Listing*, and Form MA W-9 *Request for Taxpayer Identification Number and Certification* (these forms are posted at <https://www.mass.gov/lists/osd-forms#contract-forms-and-attachments-for-all-goods-and-services->). An End-User Agreement will be included as an attachment to the *Commonwealth of Massachusetts - Standard Contract Form*.
- Grant recipient must coordinate the delivery and, if applicable, installation of the technology directly with each vendor.
- Grant recipient must submit updates on the project implementation schedule.
- Project should be completed within 18 months of MassDEP and the grant recipient signing the *Commonwealth of Massachusetts - Standard Contract Form*.
 - Although grant recipients may apply for an extension, an extension is not guaranteed. Extension requests must be filed with MassDEP no later than 1 month prior to the end of the 18-month timeframe, along with documentation showing sufficient reason for the delay and a plan and timeline for completing the project.

Post-Acquisition and Installation Process

- Grant recipient must submit a *Payment Request Form* to MassDEP, confirming that the equipment was received and installed, with detailed cost invoices and other required information.
- Grant recipient must scrap the engine and/or vehicle/switcher/non-road equipment per [Appendix D-2](#)⁷ of the [VW Trust](#)⁸ and provide MassDEP with proof upon completion. Required proof may consist of, for example, a certificate from a licensed scrap yard, photos of the scrapped equipment, etc.
 - Scrappage does not have to be complete in order for funds to be disbursed, but the grant recipient will have 90 days after the new equipment is put into operation to complete the scrappage of the replaced equipment or be required to return all grant funds. A portion of the grant funds, not to exceed 10%, may be withheld until acceptable proof of scrappage is provided to MassDEP.
- Grant recipient must use non-VW sources to fund its part of the project's costs. Grant recipient must handle its cost-share directly with the vendor and submit a copy of the payment to MassDEP.
- Once MassDEP submits all required documentation to the trustee of the grant funds to request funds be disbursed, it can take up to 105 days for the funds to be released.
- MassDEP will direct the awarded grant amount either directly to the grant recipient or to the grant recipient's vendor, as specified by the grant recipient on the *Payment Request Form*.

⁷Appendix D-2 is available at:
<https://www.vwcourtsettlement.com/wp-content/uploads/documents/DOJ/Approved%20Appendix%20D-2.pdf>

⁸<https://www.vwcourtsettlement.com/wp-content/uploads/documents/DOJ/Approved%20Consent%20Decree.pdf>

1. If the grant recipient must pay its vendor sooner than the 105 day disbursement timeline, then the grant payment will be made as a reimbursement directly to the grant recipient after project completion.
 2. If the grant recipient negotiates a payment schedule with its vendor taking the 105 day disbursement timeline into account, then the grant payment will be made directly to the vendor after project completion.
- Grant recipient must operate the new engine or equipment for at least 3 consecutive years. Grant recipient must operate the new engine or equipment for at least half of the time inside Massachusetts.
 - Grant recipient must collect data on its equipment, including data on actual use and documentation of operation inside Massachusetts, for the 3 year period they are required to operate the equipment. Grant recipient must submit such data upon request to MassDEP.