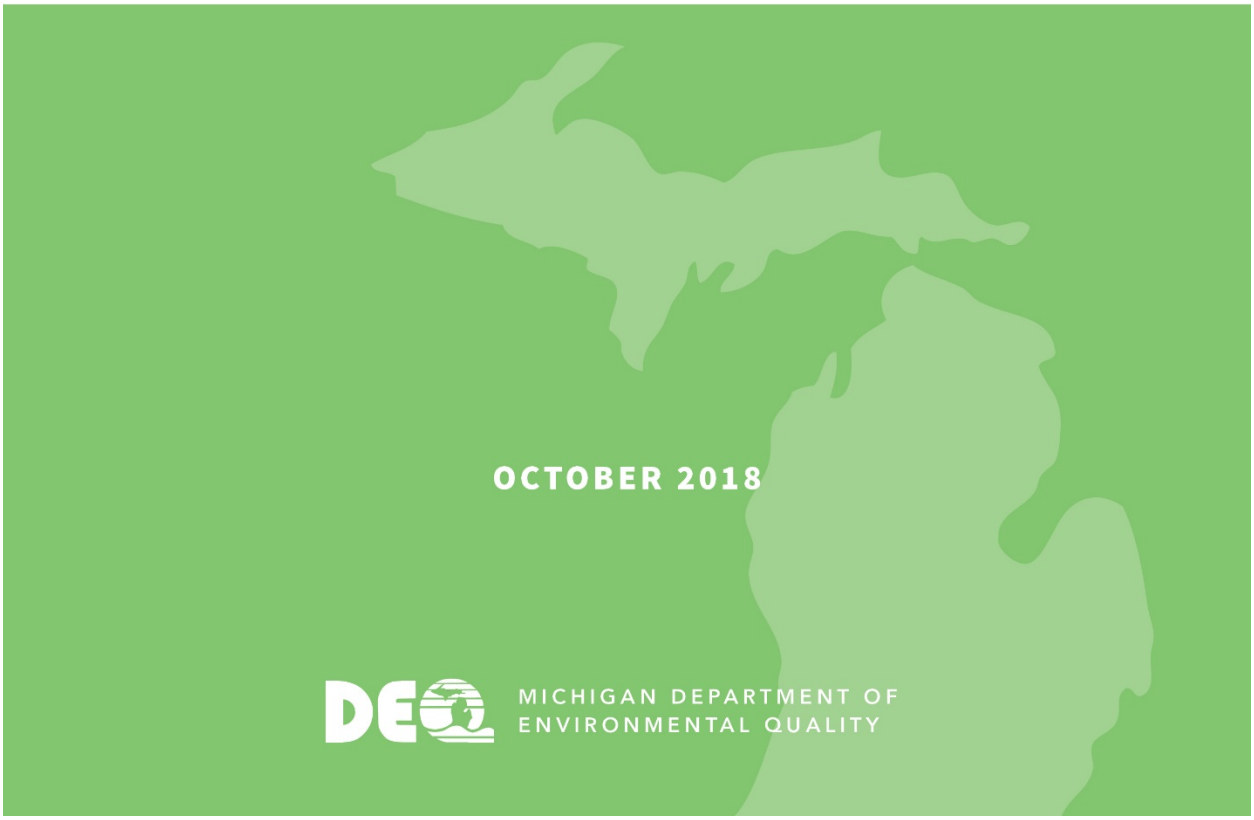
MICHIGAN
Volkswagen Settlement Beneficiary Mitigation Plan



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I. INTRODUCTION

In the fall of 2015, Volkswagen publicly admitted it had installed emissions control defeat devices – software designed to cheat emissions tests and deceive federal and state regulators – in certain Volkswagen-, Porsche-, and Audi-branded 2.0-liter and 3.0-liter diesel engine vehicles. In the litigation that ensued, an Environmental Mitigation Trust (Trust) was established as part of two partial consent decrees to resolve, among other things, claims by the United States (U.S.) concerning excess oxides of nitrogen (NOx) from Volkswagen's 2.0-liter and 3.0-liter diesel engine vehicles equipped with defeat devices. The Trust allocates more than $2.8 billion to the U.S., Puerto Rico, and the District of Columbia to fund environmental mitigation actions that reduce NOx emissions. The State of Michigan (Michigan) has been certified as a beneficiary of the Trust and has been allocated $64,807,014.63 of the approximate $2.8 billion.

The Michigan Department of Environmental Quality (MDEQ) was designated as the Lead Agency by Governor Rick Snyder to administer Michigan's allocation of the Trust. The MDEQ must adhere to requirements in the *Environmental Mitigation Trust Agreement for State Beneficiaries* (State Trust Agreement), established pursuant to the partial consent decrees. Those requirements include provisions for Eligible Mitigation Actions and Expenditures specified in Appendix D-2 of the State Trust Agreement.

As directed by the State Trust Agreement, Michigan has developed this Beneficiary Mitigation Plan that outlines how it will administer the funds it has been allocated. The plan was developed with public comment obtained through a Request for Information, a webinar, and numerous meetings held upon request with public and private stakeholders. Stakeholder input has included environmental, consumer, and other advocacy groups, schools, school districts, regional educational service agencies, transit authorities, regional planning organizations, municipalities, Michigan agencies, trade associations, utilities, vehicle suppliers, consulting groups, manufacturers, other private businesses, and individuals. The plan was also developed using statewide air quality data gathered as part of ongoing efforts by the MDEQ Air Quality Division under the Clean Air Act, Title 42 of the United State Code, Section 7201 *et seq*.

II. SETTLEMENT BACKGROUND

On October 25, 2016, the U.S. District Court for the District Court of Northern California, entered the First Partial Consent Decree in *In re: Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation*, MDL No. 2672 CRB (JSC) (Docket No. 2103-1), among Volkswagen AG, Audi AG, Volkswagen Group of America, Inc., and Volkswagen Group of America Chattanooga Operations, LLC (collectively, the Settling Defendants), the U.S., and the State of California. The First Partial Consent Decree addressed the installation and use of emissions testing defeat devices in approximately 500,000, 2009 – 2015 model year Volkswagen passenger vehicles with 2.0-liter diesel engines.

On May 17, 2017, the Court entered a Second Partial Consent Decree (Docket No. 3228-1) among the Settling Defendants, Dr. Ing. h.c. F. Porsche AG, and Porsche Cars North America, Inc. (collectively, the Defendants), the U.S., and the State of California. The Second Partial Consent Decree addressed the installation and use of emissions testing defeat devices in approximately 80,000, 2009 – 2016 model year Volkswagen passenger vehicles with 3.0-liter diesel engines.

The vehicles equipped with emissions testing defeat devices resulted in increases in NOx emissions, up to forty times the allowable amount, violating the federal Clean Air Act. The increased NOx emissions had adverse impacts to air quality and contributed to the formation of ground-level ozone, which impacts ecosystems and impairs lung function and cardiovascular health. Approximately 18,000 vehicles with defeat devices were registered in Michigan.

Pursuant to the *First Partial Consent Decree* and the *Second Partial Consent Decree*, the Defendants and Wilmington Trust, N.A. (Trustee) entered into the State Trust Agreement for the 50 States, Puerto Rico, and the District of Columbia.

III. MICHIGAN BENEFICIARY MITIGATION PLAN ELEMENTS

Paragraph 4.1 of the State Trust Agreement lists the information that must be contained in state Beneficiary Mitigation Plans. This includes:

- Michigan's overall goals for the use of State Trust Agreement funds;
- The categories of Eligible Mitigation Actions that Michigan anticipates will be appropriate to achieve the stated goals, and the preliminary assessment of the percentages of State Trust Agreement funds anticipated to be used for each type of Eligible Mitigation Action;
- A description of how Michigan considers 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 in Michigan; and
- A general description of the expected ranges of emission benefits that Michigan estimates would be realized by implementation of the Eligible Mitigation Actions identified in the Michigan Beneficiary Mitigation Plan.

The State Trust Agreement provides that state Beneficiary Mitigation Plans need only provide the level of detail reasonably ascertainable at the time of submission to the Trustee. The Michigan Beneficiary Mitigation Plan is intended to provide the public with insight into Michigan's high-level vision for its use of the State Trust Agreement funds. The Michigan Beneficiary Mitigation Plan is not binding, nor does it create any rights for any person to claim an entitlement of any kind. Michigan may adjust the goals and specific spending plans at its discretion after submission of the Michigan Beneficiary Mitigation Plan. Michigan will review the plan based on experience gained over the years and will make adjustments as needed. When revisions are necessary, Michigan will provide the Trustee with updates to the Michigan Beneficiary Mitigation Plan and shall make the updates available to the public at: www.michigan.gov/deqvwsettlement.

A. MICHIGAN'S OVERALL GOALS FOR THE USE OF STATE TRUST AGREEMENT FUNDS

The goals of the Michigan Beneficiary Mitigation Plan are:

- To reduce NOx emissions and maximize air quality benefits statewide with an emphasis on priority areas (areas designated as non-attainment and maintenance areas for the National Ambient Air Quality Standards).

- To reduce diesel emissions from school buses statewide.

- To increase adoption of zero emission vehicles (ZEV) and alternate fuel vehicles and equipment.

To determine the appropriate allocation of State Trust Agreement funds to achieve these goals, the MDEQ solicited public comments as described in the introduction above and considered the latest NOx data from the U.S. Environmental Protection Agency's (EPA) national Emissions Inventory. NOx is a precursor to ground level ozone, an air pollutant formed when NOx and volatile organic compounds react in the presence of sunlight. Breathing ozone can trigger a variety of health problems, particularly for children, the elderly, and people of all ages who have lung diseases, such as asthma. Ground level ozone can also have harmful effects on sensitive vegetation and ecosystems. In Michigan, most NOx emissions (57 percent) come from mobile sources (Chart 1) with the greatest amount (41 percent) coming from on road non-diesel, light-duty vehicles or gasoline-fueled passenger cars and trucks (Chart 2). The next three largest mobile sources of NOx emissions come from on-road, heavy-duty diesel vehicles (18 percent), closely followed by non-road, diesel equipment (14 percent) and commercial marine vessels (13 percent).

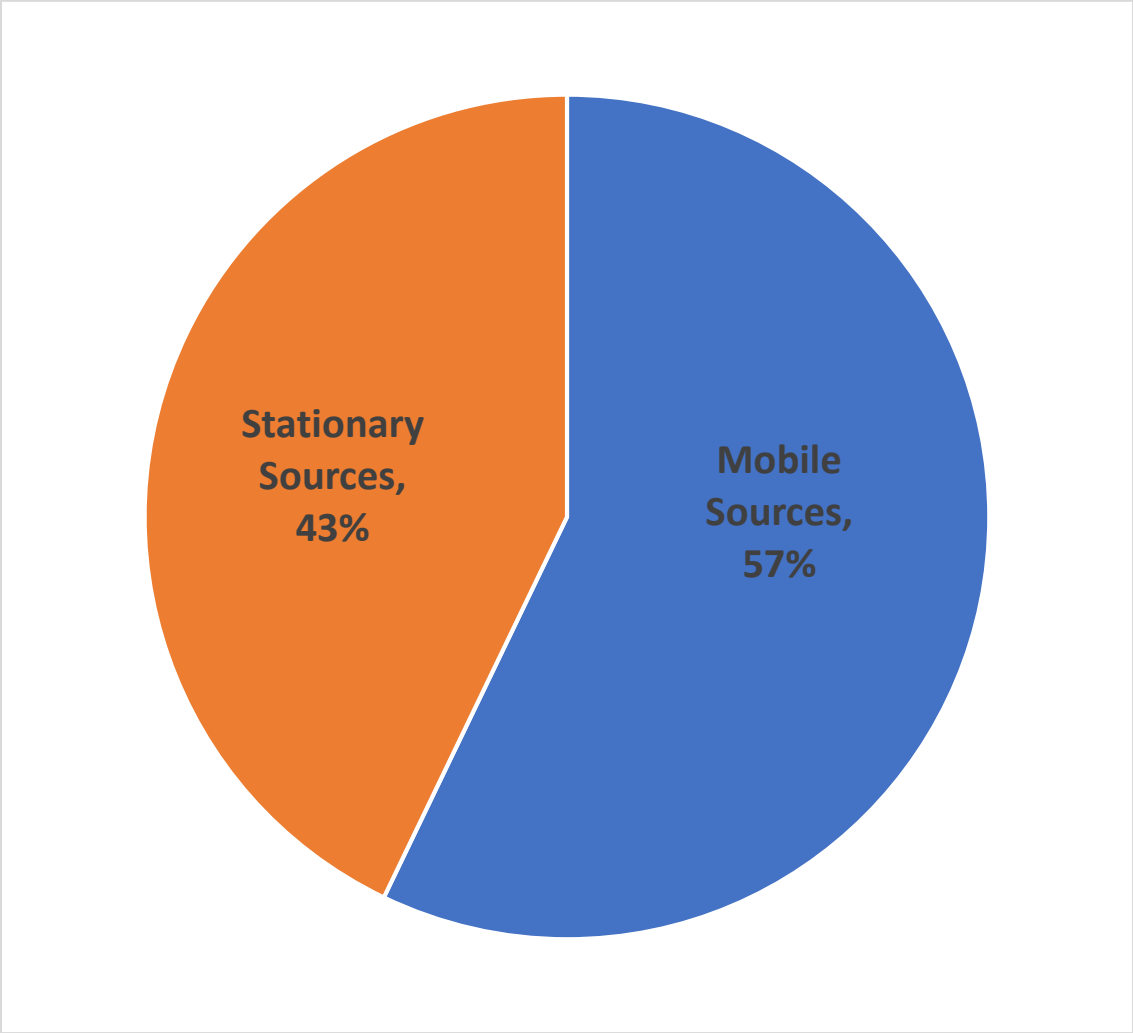

Chart 1: Total NOx Emissions based on 2014 National Emissions Inventory Data

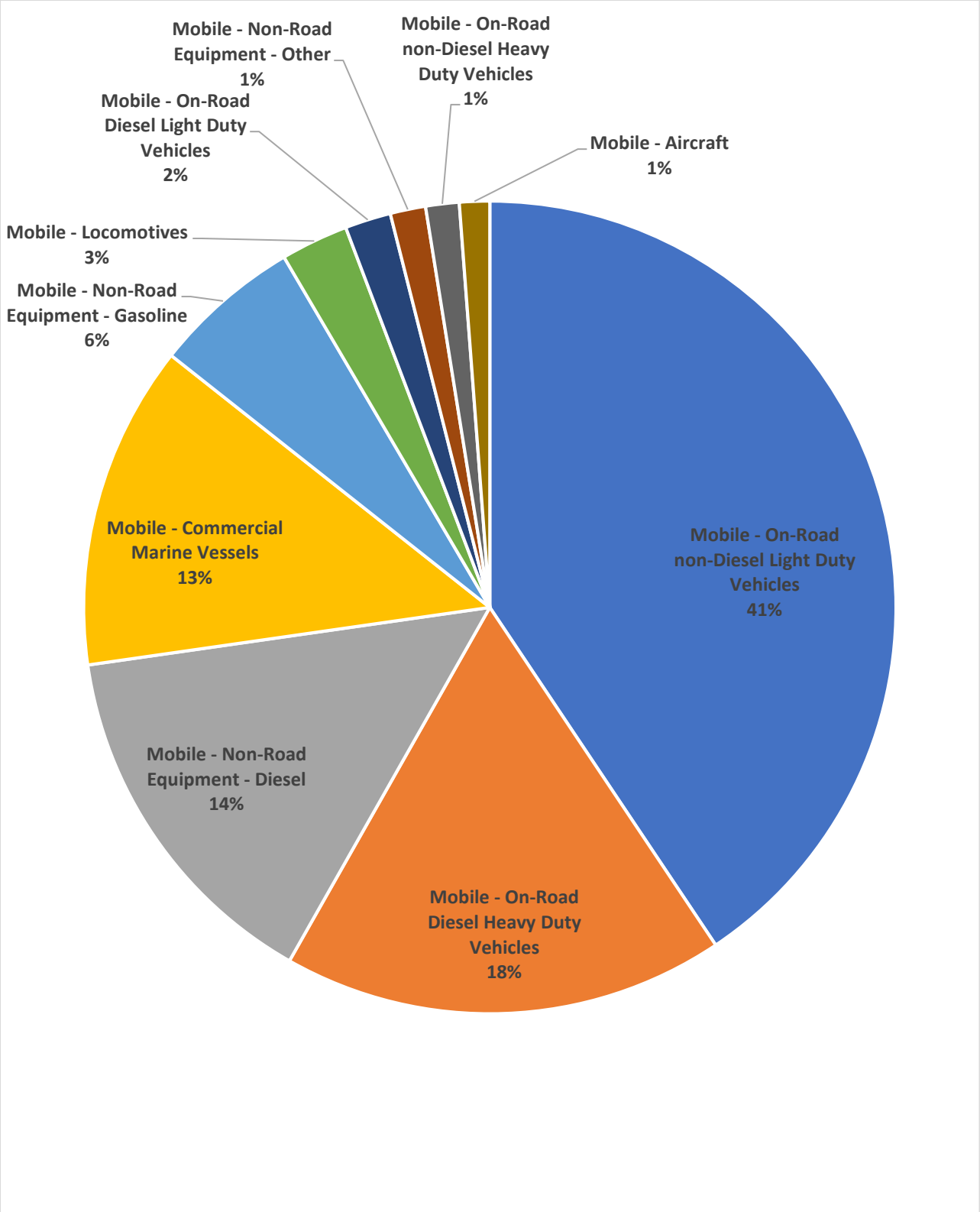

Chart 2: Mobile NOx Emissions Based on 2014 National Emissions Inventory Data

B. CATEGORIES OF ELIGIBLE MITIGATION ACTIONS

The National Emissions Inventory NOx data combined with public comments and evaluations of the eligible mitigation actions informed the decision to allocate funds to the categories of Eligible Mitigation Actions listed in Table 1 below. These are the actions that Michigan has determined are appropriate to achieve the stated goals of this Beneficiary Mitigation Plan.

Categories of Eligible Mitigation Actions	Funding Distribution	Percentage of Funds Allocated
Class 4-8: Local Freight Vehicles (Eligible Medium and Large Trucks and Port Drayage Trucks), Shuttle Buses and Transit Buses	$19,442,104.39	30%
Freight Switchers, Great Lakes Ferries/Tugs, Shore power, Port Cargo Handling Equipment and Forklifts, Airport Ground Support Equipment	$16,201,753.66	25%
Class 4-8 School Buses	$12,961,402.93	20%
Light-duty ZEV Supply Equipment	$9,721,052.19	15%
Diesel Emission Reduction Act (DERA) Option	$0	0%
Program Administration	$6,480,701.46	10%
Total	**$64,807,014.63**	**100%**

Table 1: Eligible Mitigation Action Allocations

The following discussion explains the categories of Eligible Mitigation Actions.

1. CLASS 4-8: LOCAL FREIGHT VEHICLES (ELIGIBLE MEDIUM AND LARGE TRUCKS AND PORT DRAYAGE TRUCKS), SHUTTLE BUSES AND TRANSIT BUSES

Projects in this category will involve the replacement of eligible local freight vehicles, shuttle buses and transit buses with new diesel, alternate fueled or all-electric vehicles and buses. Repowering of vehicles and buses will not be funded. Eligible vehicles and buses must be scrapped. Funding amounts for non-government-owned vehicles and buses will be up to 25 percent of the cost of a new diesel or alternate fueled vehicle or bus and up to 50 percent of the cost of a new all-electric vehicle or bus. Funding amounts for government-owned vehicles and buses will be up to 25 percent of the cost of a new diesel vehicle or bus, up to 40 percent of the cost of an alternate fueled vehicle or bus, and up to 70 percent of the cost of a new all-electric vehicle or bus. Project applicants will need to demonstrate that adequate charging infrastructure is available for any all-electric projects. A maximum amount per vehicle or bus may be applied.

2. CLASS 4-8 SCHOOL BUSES (NON-GOVERNMENT OWNED, GOVERNMENT-OWNED AND PRIVATELY-OWNED SCHOOL BUSES UNDER CONTRACT WITH A PUBLIC-SCHOOL DISTRICT)

Projects in this category will involve the replacement of eligible school buses with new diesel, alternate fueled, or all-electric school buses. Repowering of school buses will not be funded. Eligible school buses must be scrapped. Funding amounts for non-government owned school buses will be up to 25 percent of the cost of a new diesel or alternate fueled school bus and up to 50 percent of the cost of a new all-electric school bus and charging station. Funding amounts for government owned and privately-owned school buses under contract with a public-school district will be up to 25 percent of the cost of a new diesel school bus, up to 40 percent of the cost of an alternate fueled school bus, and up to 70 percent of the cost of a new all-electric school bus and charging station. Charging infrastructure costs other than the charging station will not be funded. Project applicants will need to demonstrate that adequate charging infrastructure is available for any all-electric projects. Of the total funds in this category, up to three million dollars will be allocated for all-electric school buses and charging stations. A maximum amount per bus and charging station may be applied.

3. FREIGHT SWITCHERS, GREAT LAKES FERRIES/TUGS, SHORE POWER, AIRPORT GROUND SUPPORT EQUIPMENT, PORT CARGO HANDLING EQUIPMENT AND FORKLIFTS

Projects in this category will involve freight switchers, Great Lakes ferries and tugs, shore power, airport ground support equipment, port cargo handling equipment, and forklifts as described below.

a. Eligible Freight Switchers

Eligible freight switchers may be repowered with any new diesel or alternate fueled or all-electric engine(s) that is certified to meet the applicable U.S. EPA emissions standards as published in the Code of Federal Regulations for the engine model year in which the eligible freight switcher mitigation action occurs. Funding amounts for non-government-owned freight switchers will be up to 40 percent of the cost of a repower with a new diesel or alternate fueled engine, including the cost of installation of such engine(s), and up to 50 percent of the cost of a repower with a new all-electric engine(s), including the cost of installation of such engine(s). Funding amounts for government-owned freight switchers will be up to 60 percent of the cost of a repower with a new diesel or alternate fueled engine(s), including the cost of installation of such engine(s), up to 70 percent of the cost of a repower with a new all-electric engine(s), including the cost of installation of such engine(s). Eligible freight switchers must be scrapped. Project applicants will need to demonstrate that adequate charging infrastructure is available for any all-electric projects. A maximum amount per freight switcher and installation cost may be applied.

b. Eligible Ferries and/or Tugs

Eligible ferries and/or tugs must be repowered with any new Tier 3 or Tier 4 diesel, or alternate fueled engine, or with all-electric engines, or may be upgraded with a U.S. EPA Certified Remanufacture System, or a U.S. EPA Verified engine upgrade. Funding amounts for non-government-owned ferries and/or tugs will be up to 40 percent of the cost of a repower with a new diesel or alternate fueled engine, including the cost of installation, and up to 50 percent of the cost of a repower with a new all-electric engine, including the costs of installation, of such engine. Funding amounts for government-owned ferries and/or tugs will be up to 60 percent of the cost of a repower with a new diesel or alternate fueled engine, including the cost of installation, up to 70 percent of the cost of a repower with a new all-electric engine, including the cost of installation. Eligible ferries and/or tugs must be scrapped. Project applicants will need

to demonstrate that adequate charging infrastructure is available for any all-electric projects. A maximum amount per ferry/tug and installation cost may be applied.

c. Eligible Marine Shore Power

Eligible marine shore power includes equipment for vessels that operate within the Great Lakes, including systems that enable a compatible vessel's main 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 Connections Systems) and should be supplied with power sources from the local utility grid. Funding amounts for non-government-owned equipment will be up to 25 percent of the costs associated with the shore-side system, including cable, cable management systems, shore power coupler systems, distribution control systems, installation, and power distribution components. Funding amounts for government-owned equipment will be up to 70 percent of the costs associated with the shore-side system, including cable, cable management systems, shore power coupler systems, distribution control systems, installation, and power distribution components. A maximum equipment amount may be applied.

d. Eligible Airport Ground Support Equipment

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 all-electric form. Eligible airport ground support equipment must be scrapped. Funding amounts for non-government-owned equipment will be up to 50 percent of the cost of a repower or new all-electric airport ground support equipment. Funding amounts for government-owned equipment will be up to 70 percent of the cost of a repower or new all-electric airport ground support equipment. Project applicants will need to demonstrate that adequate charging infrastructure is available. A maximum equipment amount may be applied.

e. Eligible Forklifts and Port Cargo Handling Equipment

Eligible fork lifts and port cargo handling equipment may be repowered with an all-electric engine or replaced with the same equipment in an all-electric form. Funding amounts for non-government-owned equipment will be up to 50 percent of the cost of a repower or all new all-electric equipment. Funding amounts for government-owned equipment will be up to 70 percent of the cost of a repower or new all-electric equipment. Eligible forklifts and port cargo handling equipment must be scrapped. Project applicants will need to demonstrate that adequate charging infrastructure is available. A maximum equipment amount may be applied.

4. LIGHT-DUTY ZEV SUPPLY EQUIPMENT

As indicated in Table 1 above, 15 percent of Michigan's total allocation will be spent on new Light-duty ZEV Supply Equipment. This is the maximum amount that can be allocated to this category, as specified in the State Trust Agreement. The MDEQ and the Michigan Agency for Energy (MAE) have entered into a Memorandum of Understanding with an agreement that the MAE will create, implement and administer these projects via a program for Light-duty ZEV Supply Equipment on behalf of the MDEQ (see Appendix 1).

5. DIESEL EMISSION REDUCTION ACT (DERA) OPTION

The Michigan Clean Diesel DERA program will continue as it has in the past, using state and federal funds, and will not be using State Trust Agreement funds to support projects.

6. ELIGIBLE MITIGATION ACTIONS LIMITATIONS

The State Trust Agreement does not allow states to spend funds on anything beyond this list of approved vehicles and equipment types. No funds can be spent on projects such as replacing light-duty cars or trucks. Infrastructure costs for ZEV and equipment will be funded in select categories as outlined above. No administration expenditures are allowed other than those incurred by the MDEQ and the MAE.

C. POTENTIAL BENEFICIAL IMPACT OF ELIGIBLE MITIGATION ACTIONS ON AIR QUALITY IN AREAS THAT BEAR A DISPROPORTIONATE SHARE OF AIR POLLUTION BURDEN IN MICHIGAN

Michigan has several areas that exceed air quality standards. These areas are defined as counties (or partial counties) that are one or more of the following:

- Areas designated non-attainment or maintenance for a National Ambient Air Quality Standard criteria pollutant.

- Areas with toxic air pollutant concerns as identified from the National Air Toxics Assessment (NATA) data.

There are currently ten counties that are identified as air quality priority areas in Michigan. These counties are designated as non-attainment for the 2015 ozone standard and include: Wayne, Oakland, Monroe, Macomb, St. Clair, Livingston, Washtenaw, Muskegon, Berrien, and Allegan. Chart 3 below summarizes the distribution of mobile NOx emissions among these air quality priority areas by county. These areas will be updated as new designations are made by the U.S. EPA. The potential beneficial impact of Eligible Mitigation Actions in these areas will be improved air quality and progress toward meeting National Ambient Air Quality Standards.

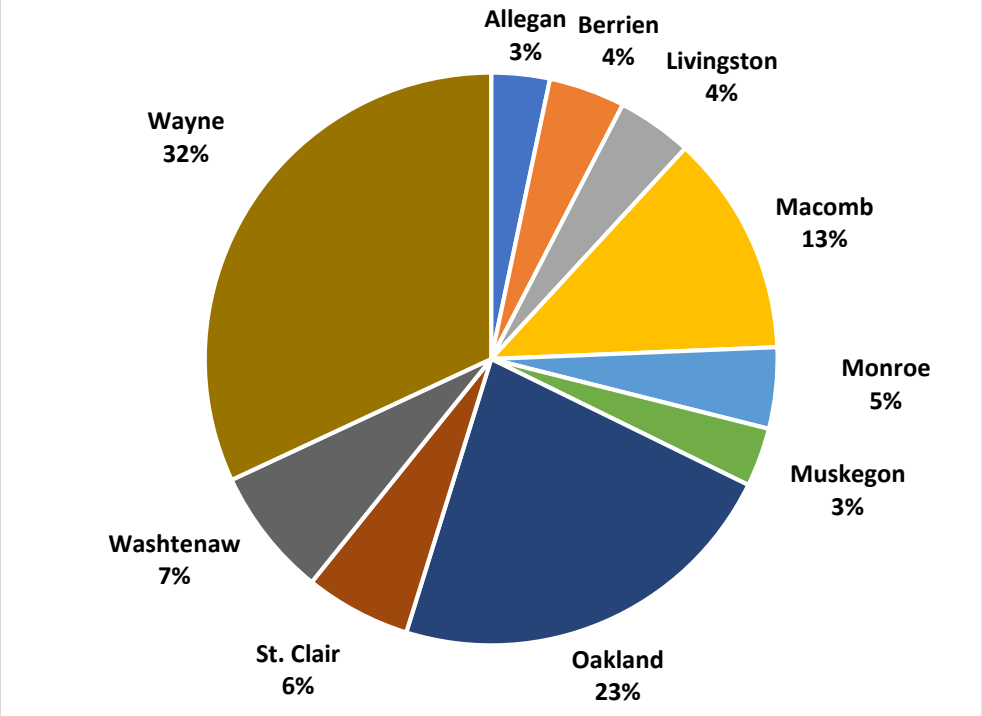

Chart 3: Distribution of Total Mobile NOx Emissions Among Priority Counties

D. EXPECTED EMISSION BENEFITS

An estimate of the emission reduction benefits that could be achieved was calculated using the U.S. EPA Diesel Emissions Quantifier with a hypothetical mix of vehicle and equipment types, model years, and fuel types (Table 2). Vehicle and equipment cost estimates were based on information obtained from stakeholders and projects funded through the DERA Grant Program. Actual emission reductions realized by the Eligible Mitigation Actions will be dependent on the types of projects selected for funding and any changes in technology.

Estimated Emission Reductions	NOx Short Tons	Particulate Matter 2.5 Short Tons	Hydrocarbon Short Tons	Carbon Monoxide Short Tons
Annual Results	**296**	**27**	**23**	**139**

Table 2: Estimated Emissions Reductions from DERA Type Projects

IV. BENEFICIARY MITIGATION PLAN IMPLEMENTATION INFORMATION

Michigan has up to ten years from October 2, 2017, to spend its allocation of State Trust Agreement funds as specified in the State Trust Agreement. The MDEQ expects to solicit projects from Eligible Mitigation Action categories in four phases. This will allow time to verify that funds are properly allocated and to adjust the Beneficiary Mitigation Plan as needed, based on what has been learned in previous phases or due to changes in technology.

Projects will be solicited through a competitive application process and funded on a reimbursement basis after all required documentation has been successfully submitted and approved by the appropriate state agency. The MDEQ and MAE will develop criteria to score project applications and select those that best align with plan goals. Eligible applicants will include, but are not limited to: local, state, and federal government agencies; school districts; transit authorities; private businesses; metropolitan planning organizations; non-profit organizations; and tribes.

Below is the estimated schedule by which projects will be solicited by the MDEQ. The phase timeframes may be modified as needed to ensure successful project implementation. See the Light-duty ZEV Supply Equipment Program for the MAE's implementation plan included in Appendix 1.

PHASE 1: 2018 – 2021

- School buses

PHASE 2: 2019 – 2022

- Class 4-8: Local Freight Vehicles (Eligible Medium and Large Trucks and Port Drayage Trucks)
- Class 4-8: Shuttle Buses, Transit Buses, Airport Ground Support Equipment
- Freight Switchers, Great Lakes Ferries/Tugs, Shore Power, Port Cargo Handling Equipment, and Forklifts

PHASE 3: 2023 – 2025

- Class 4-8: Local Freight Vehicles (Eligible Medium and Large Trucks and Port Drayage Trucks)
- Class 4-8: Shuttle Buses, Transit Buses, Airport Ground Support Equipment

- Freight Switchers, Great Lakes Ferries/Tugs, Shore Power, Port Cargo Handling Equipment, and Forklifts

PHASE 4: 2025 – 2027

- Any remaining funds will be spent in the most appropriate category or categories, based on knowledge and experience from previous phases.

Between Phase 2 and Phase 3, MDEQ will review what has been learned from previous phases. If it is concluded that revisions to the Beneficiary Mitigation Plan are necessary, they will be made, and a revised plan will be submitted to the Trustee and posted on the MDEQ website at www.michigan.gov/deqvwsettlement.

DEFINITIONS

"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, a vehicle, or piece of equipment that is powered by an engine that uses a fuel different from or in addition to gasoline fuel or diesel fuel (e.g., compressed natural gas, propane, diesel-electric hybrid).

"Certified Remanufacture System or Verified Engine Upgrade" shall mean engine upgrades certified or verified by U.S. EPA or California Air Resources Board (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 pounds.

"Class 4-8 School Bus, Shuttle Bus, or Transit Bus(es)" shall mean vehicles with a GVWR greater than 14,001 pounds 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 GVWR greater than 33,000 pounds used for port drayage and/or freight/cargo delivery (including waste haulers, dump trucks, concrete mixers).

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

"Forklift" shall mean non-road equipment used to lift and move materials short distances; generally, this 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 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 pounds.

Class 2: 6001-10,000 pounds.

Class 3: 10,001-14,000 pounds.

Class 4: 14,001-16,000 pounds.

Class 5: 16,001-19,500 pounds.

Class 6: 19,501-26,000 pounds.

Class 7: 26,001-33,000 pounds.

Class 8: > 33,001 pounds.

“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 U.S. 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 U.S. EPA Certified Remanufacture System, and/or diesel engine upgrades in ferries/tugs with an U.S. EPA Verified Engine Upgrade. All-electric and fuel cell Repowers do not require U.S. 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 U.S. EPA engine emission classifications for non-road, 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).

APPENDIX 1

LIGHT-DUTY ZERO EMISSION VEHICLE SUPPLY EQUIPMENT PROGRAM

Introduction

As specified in the Memorandum of Understanding between the Michigan Department of Environmental Quality (MDEQ) and the Michigan Agency for Energy (MAE), the MAE will create, implement, and administer the State of Michigan's Light-duty Zero Emission Vehicle Supply Equipment Program (Program). The Program will incentivize public and private investments in an electric vehicle charging infrastructure in areas in Michigan that are designated as "non-attainment" for the U.S. Environmental Protection Agency (U.S. EPA) 2015 ozone National Ambient Air Quality Standards (NAAQS), maintenance for the 2006 particulate matter NAAQS, and other geographical areas as deemed necessary to achieve reductions in oxides of nitrogen (NOx) emissions and human exposure. Hydrogen dispensing infrastructure is supported within the Program.

Program Highlights

The Program will incorporate the requirements of the Environmental Mitigation Trust Agreement for State Beneficiaries, including Appendix D-2, and use a data-driven approach to establish requirements for eligible activities (i.e., electric vehicle [EV] and fuel-cell equipment dispensing equipment allocations, cost share, and NOx reductions) within designated NAAQS non-attainment and maintenance areas selected for investments. The MAE, in concert with stakeholders, will direct and prioritize investments in EV direct current (DC) fast charging equipment and accessories including, but not limited to, charger stand, charge cord, power outlet, battery storage, backup power, and software. The MAE will also work with stakeholders to direct similar investments to support a hydrogen fuel-cell dispensing infrastructure.

The MAE will select projects through a solicitation process. All proposals will be subject to an evaluation by a joint evaluation committee headed by the MAE. The evaluation will be conducted in a manner appropriate to select the applicant(s) for entering into an agreement to perform the proposed project within the established timeline. Initial screening of the applications will be conducted to ensure applicants and projects meet all eligibility requirements. Selections will be based on several factors, including the project's potential reduction in NOx emissions and human exposure, location, and cost-effectiveness of the proposal. Each project will require a cost-share (to-be-determined), and final candidates will undergo the MAE's due diligence review process.

Program Implementation

The timeframe for the Program is expected to be up to ten (10) years and be comprised of up to four annual rounds of financial assistance, with remainder years of the Program dedicated to project monitoring and administrative functions.

The MAE, in concert with partners (automobile, state agencies, electric/gas utilities, municipalities, public schools/universities, not-for-profits, healthcare industry, and others), will solicit projects according to the following schedule:

Round 1: 0 – 12 Months

Apply one-third (1/3) of the State Trust Agreement funds toward:

- Building a fast charge, EV charging (EVC) infrastructure (20KW to 150KW) in public places including, but not limited to: municipal buildings, medical centers, state government buildings, and public schools/universities.
- A portion of the funds will be used to provide support for a Hydrogen Fuel Cell Dispensers (HFCD) program to incentivize deployment of HFCD equipment in designated areas.

Round 2: 12 – 24 Months
Direct one-third (1/3) of the State Trust Agreement funds toward deploying a fast charging EVC infrastructure:

- 20KW to 150KW EVCs at port authorities, retail centers, cultural sites, recreational location, lots, parks, other locations; and
- 150KW – 350KW DC fast chargers in public places and adjacent to Michigan's highways and roadways, where feasible.
- Continue support for a Hydrogen Fuel Cell Dispensers (HFCD) program to incentivize deployment of HFCD equipment in designated areas.

Round 3: 24 - 36 Months
Direct one-third (1/3) of the State Trust Agreement funds toward:

- DC fast and extremely fast charging (150 – 350KW and above) equipment adjacent to state highways and roadways; and
- HFCD or other analogous successor technologies in designated places.

Round 4 (if unobligated dollars are available): 36 - 48 Months

- Continue allocations for DC fast and extremely fast charging (150 – 350KW and above) equipment adjacent to state highways and roadways; and
- Continue HFCD or other analogous successor technologies in designated areas.

Program Budget
The maximum budget for the Program, including MAE Administration Costs, is $9,721,052. The approximate amount of funding allocated to each solicitation round is $3,240,351 (in fiscal years 2019, 2020, and 2021).

Expected Outcomes
The MAE will use standard methods and estimates from proposals to calculate anticipated:

- Reductions in NOx levels and human exposures to NOx emissions from the Program investments;
- Optimal placement of EV charging stations;
- Optimal placement of HFCD dispensing stations; and
- Leverage of private sector investments in state-wide EVC infrastructure.