

Commonwealth of Pennsylvania



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Beneficiary Mitigation Plan

*In re: Volkswagen “Clean Diesel” Marketing, Sales Practices, and
Products Liability Litigation, No. 3:15-md-02672-CRB (N.D. Cal.)
(MDL 2672)*

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Beneficiary Mitigation Plan – Pennsylvania

I. Settlement Summary and Background

A. Settlement Summary

This Beneficiary Mitigation Plan for the Commonwealth of Pennsylvania (Commonwealth or Pennsylvania) summarizes how Pennsylvania plans to use the funds allocated to it under the Environmental Mitigation Trust Agreement (Trust Agreement) finalized under the Partial Consent Decree approved by the court on October 25, 2016, in the case, *In Re: Volkswagen “Clean Diesel” Marketing, Sales Practices, and Products Liability Litigation*¹ (First Partial Consent Decree). This multidistrict litigation is in the United States District Court for the Northern District of California, No. 3:15-md-02672-CRB (N.D. Cal.) MDL No. 2672.

The First Partial Consent Decree establishes a \$2.7 billion environmental mitigation trust (Mitigation Trust), to be divided primarily among the participating states, as part of a settlement of consumer protection law claims against Volkswagen and related entities for excess emissions from certain 2.0 liter vehicles. A Second Partial Consent Decree, in accordance with the same settlement and relating to 3.0 liter subject vehicles, was approved by the court on [DATE]². The Second Partial Consent Decree commits an additional \$225 million to the Mitigation Trust, also to be divided primarily among the participating states. It also makes non-material modifications to Appendix D (Form of Environmental Mitigation Trust Agreement) of the First Partial Consent Decree by broadening the coverage of the Trust Agreement to include the 3.0 liter subject vehicles and the additional funding.

Under these Consent Decrees, the Commonwealth submitted the required Certification for Beneficiary Status on [DATE] to the court-appointed Trustee of the Mitigation Trust, Wilmington Trust, N.A. Pennsylvania was approved as a ‘Beneficiary’ of the Mitigation Trust on [DATE]. The Certification identifies the Pennsylvania Department of Environmental Protection (DEP or Department) as the Commonwealth’s “Lead Agency” as defined in the First Partial Consent Decree. Pennsylvania is currently allocated a total of \$118,569,539.52 of the Mitigation Trust to fund eligible diesel source NO_x-reducing projects. The Commonwealth’s allocation is specified in Appendix D-1 of the First Partial Consent Decree (\$110,740,310.73) and in the Mitigation Allocation Appendix of the Second Partial Consent Decree (\$7,829,228.79). A link to the First and Second Partial Consent Decrees, including Appendices, is available on the Department’s Volkswagen web site here: <http://www.dep.pa.gov/Business/Air/Volkswagen/Pages/default.aspx>.

¹ As of 5/5/2017, the Trust Agreement referenced in this document is not final. Any relevant changes to the Trust Agreement that occur before Pennsylvania’s final Beneficiary Mitigation Plan is submitted to the Trustee will be addressed in this document before submission. These changes may occur after the public comment period for the Beneficiary Mitigation Plan has closed.

² Please note that highlighted items represent information that is not final as of the publication of the draft Beneficiary Mitigation Plan.

B. Case Background

In January 2016, the United States (U.S.) sued Volkswagen and associated companies (VW), alleging that VW installed defeat devices in certain model year 2009-2016 vehicles, and that the defeat devices activated during emissions testing to make the vehicles appear compliant, when in fact the vehicles emitted 9 to 40 times the allowable amount of oxides of nitrogen (NO_x), a harmful air pollutant, during on-road operation. California also sued.

The U.S., California, and the ‘Settling Defendants’, as defined in the court-approved First Partial Consent Decree, lodged the First Partial Consent Decree in June 2016 to settle violations of the federal Clean Air Act and the California Health and Safety Code for the approximately 500,000 2.0-liter VW vehicles in the U.S. that were equipped with defeat devices. The U.S., California and the ‘Defendants’, as defined in the Second Partial Consent Decree, lodged the Second Partial Consent Decree on December 20, 2016 to settle violations of the federal Clean Air Act and the California Health and Safety Code for the approximately 80,000 3.0-liter VW vehicles that were equipped with defeat devices.

Consistent with the terms of the Trust Agreement (Appendix D of the First Partial Consent Decree), this Beneficiary Mitigation Plan provides the public with insight into Pennsylvania’s overall structure for focused use of the mitigation funds, as well as information about the specific project types eligible for funding under the final settlement agreement.

As specified in paragraph 4.1 of the Trust Agreement (Appendix D of the First Partial Consent Decree), the Beneficiary Mitigation Plan will not be binding on Pennsylvania when it is final, nor will the Beneficiary Mitigation Plan create any rights in any person(s) or entity(ies) to claim an entitlement or vested right of any kind. The final Beneficiary Mitigation Plan will provide the level of detail reasonably ascertainable at the time of submission to the Trustee of the Mitigation Trust. Pennsylvania may adjust its goals and specific spending plans by updating the Beneficiary Mitigation Plan under the terms of the settlement documents. The process for updating the Beneficiary Mitigation Plan is further described below.

The Trust Agreement is designed to be straightforward and uncomplicated to implement. Ten specific “Eligible Mitigation Actions,” as well as the “Eligible Mitigation Action Administrative Expenditures” for which the Mitigation Trust may be used, are set forth clearly in Appendix D-2 of the First Partial Consent Decree. A state is not required to use the funding available to it under the Mitigation Trust for all 10 categories of eligible projects. Pennsylvania, however, has chosen to consider funding all Eligible Mitigation Actions, as defined by the settlement documents.

This Beneficiary Mitigation Plan describes how Pennsylvania plans to allocate the funding. The Trustee, however, will determine what projects are funded in the Commonwealth, pursuant to the terms of the settlement agreement documents.³

³ Appendix D-2 of the First Partial Consent Decree is attached to this Beneficiary Mitigation Plan for reference. The Second Partial Consent Decree does not alter the original “Eligible Mitigation Actions” or the “Eligible Mitigation Action Administrative Expenditures” that are identified in Appendix D-2 of the First Partial Consent Decree. The additional \$7,829,228.79 of the Mitigation Trust allocated to Pennsylvania under the Second Partial Consent Decree

II. Air Quality in Pennsylvania

To better understand the impact of the excess emissions from the VW vehicles in Pennsylvania, it is important to understand current air quality in Pennsylvania. Reducing emissions from diesel engines is one of the most important air quality challenges facing the Commonwealth.

According to the U.S. Environmental Protection Agency's (EPA) 2011 National Emission Inventory, emissions from highway and non-road diesel-powered mobile sources (including marine, rail, and aviation) accounted for approximately 150,891 tons per year (tpy) of NO_x in Pennsylvania in 2011.⁴ New standards for diesel vehicles and equipment promulgated by the EPA, applicable to Model Year 2007 and newer vehicles and engines,⁵ will ensure that newer medium-duty and heavy-duty diesel engines will be less polluting. Many older diesel engines, however, can operate for 25 to 30 years before replacement is required. Thus, it may be many years before existing equipment is replaced with newer, cleaner equipment due to typical fleet turnover. It is likely that a large population of older diesel engines unaffected by the new federal standards will continue to operate in the Commonwealth well into the future. Many strategies and programs exist to reduce emissions from these older engines. Replacing, retrofitting, or repowering many older diesel vehicles and engines are cost-effective strategies to reduce emissions of NO_x and volatile organic compounds (VOC), which are precursor pollutants for the formation of fine particulate matter (PM_{2.5}) and ground-level ozone, by as much as 90 percent or more. Dollars available under the Mitigation Trust will enable the Commonwealth to help fund more of these types of projects than the Commonwealth can currently fund through Pennsylvania's existing programs.

III. Elements of Pennsylvania's Beneficiary Mitigation Plan⁶

Section 4.1 of the Trust Agreement (Appendix D of the First Partial Consent Decree) specifies several elements that a Beneficiary Mitigation Plan must address:

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

is available for the same "Eligible Mitigation Actions" and "Eligible Mitigation Action Administrative Expenditures" that are identified in Appendix D-2 of the First Partial Consent Decree.

⁴ To access EPA's 2011 National Emission Inventory data, see: <https://www.epa.gov/air-emissions-inventories/2011-national-emissions-inventory-nei-data>.

⁵ For a list of EPA regulations for on-road heavy duty vehicles, see: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-smog-soot-and-other-air-pollution-commercial#regulations>.

⁶ This section addresses the first four required elements of the Beneficiary Mitigation Plan, as listed in Section 4.1 of the Trust Agreement (Appendix D of the First Partial Consent Decree). The fifth required element, relating to public input on the Beneficiary Mitigation Plan, is addressed in Section IV of this document.

- D. A general description of the expected ranges of emission benefits the Beneficiary estimates would be realized by implementation of the Eligible Mitigation Actions identified in the Beneficiary Mitigation Plan.

Additionally, the Beneficiary Mitigation Plan shall explain the process by which the Beneficiary shall seek and consider public input on its Beneficiary Mitigation Plan. Information about public input is described separately, in Section IV of this document.

The first four required items of the Beneficiary Mitigation Plan, listed above as items A-D, are discussed here:

A. The Beneficiary’s Overall Goal for the Use of the Funds.

Pennsylvania will apply to the Trustee to use funds to fund projects throughout the Commonwealth that will reduce or eliminate emissions of NO_x, focusing on the most cost-effective projects that will maximize emission reductions. The following list indicates Pennsylvania’s overall goals and is not meant to be exclusive. Pennsylvania may consider other qualifications and factors when determining whether to submit projects to the Trustee for funding.

Consideration will be given to distributing project funding statewide, as appropriate, primarily based on the cost-effectiveness and the quantity of NO_x emission reductions. Pennsylvania anticipates the following:

1. Focus on funding projects that repower, retrofit, or replace large diesel engines, such as locomotives or marine diesel engines.
2. Focus on funding projects that repower, retrofit, or replace large numbers of older diesel vehicles and engines.
3. Focus on vehicles, engines, and equipment operating or located in or near areas that bear a disproportionate share of the air pollution burden (priority areas), such as:
 - Distribution centers;
 - Multimodal centers;
 - Ports;
 - Rail and bus terminals;
 - Airports;
 - Brownfields; and
 - Environmental justice areas.
4. Prioritize projects located in areas that are in nonattainment of National Ambient Air Quality Standards (NAAQS) for ozone, particulate matter (PM), or nitrogen dioxide (NO₂). Nonattainment is defined differently for each NAAQS and is based on the results

of ambient air monitoring.⁷ A list of EPA-designated NAAQS nonattainment areas in Pennsylvania is available on the following website: <https://www.epa.gov/green-book>. Pennsylvania also maintains an ‘Attainment Status’ website here: <http://www.dep.pa.gov/Business/Air/BAQ/Regulations/Pages/Attainment-Status.aspx>.

5. Focus on projects located in areas with high population density and high traffic density. In Pennsylvania, areas of high population density (such as Philadelphia and Pittsburgh) and high traffic density (such as the I-95 corridor, the I-81 corridor, and major ports) are often the areas with the poorest air quality. Projects in these areas will result in much-needed health benefits for residents of these areas, who are often disproportionately members of vulnerable populations such as the elderly and the economically disadvantaged.
6. Consideration of project benefits that further Pennsylvania’s energy, environmental, or economic development goals including, but not limited to, reducing other significant pollutants, promoting or supporting infrastructure development relating to the projects, or transforming or advancing the market for technologies eligible for Mitigation Trust funding.

B. The Categories of Eligible Mitigation Actions the Beneficiary Anticipates will be Appropriate to Achieve the Stated Goals and the Preliminary Assessment of the Percentages of Funds Anticipated to be Used for Each Type of Eligible Mitigation Action⁸

1. Pennsylvania will consider submitting projects to the Trustee for funding from all the categories of Eligible Mitigation Actions identified in Appendix D-2 of the First Partial Consent Decree, including project types authorized under the Diesel Emission Reduction Act (DERA). Pennsylvania will prioritize projects to submit to the Trustee for funding that are the most cost-effective and that yield the largest amount of NO_x emission reductions.
2. For the development of this Beneficiary Mitigation Plan, Pennsylvania has separated the Eligible Mitigation Actions⁹ into four groups by project type, namely:
 - a. On-road fleet projects;
 - b. Non-road/off-road fleet projects;
 - c. DERA-eligible fleet projects; and

⁷ For an explanation of “nonattainment” for each NAAQS, *see* 40 C.F.R. Part 50.

⁸ Over the term of the Beneficiary Mitigation Plan, these allocations may shift depending on demand and eligible project needs in Pennsylvania, as well as other economic and policy factors.

⁹ The Commonwealth has placed all 10 Eligible Mitigation Actions within the four groups in Sections III.B.5.a-d. A new or existing funding program will be used or developed for each of the groupings. See Section V of this document for a discussion of the funding mechanisms available to the Department.

- d. Light-duty zero-emission vehicle supply equipment.
3. For this Beneficiary Mitigation Plan, the Department considers a fleet to be either a single eligible vehicle, engine, or piece of equipment or combination of vehicles, engines, or equipment which are eligible as part of an Eligible Mitigation Action. The definition of a fleet may be further refined by this Commonwealth as existing funding programs are revised or new funding programs are developed.¹⁰ Pennsylvania may use up to 15 percent of the total Mitigation Trust allocation for administrative costs, as authorized in Appendix D-2 of the First Partial Consent Decree.¹¹
 4. For some Eligible Mitigation Actions, it is not currently clear whether the fleets eligible for projects under the Eligible Mitigation Actions exist in Pennsylvania (government-owned freight switchers, for example) and, if they do, whether there is interest from any public or private entity in participating in any of the Eligible Mitigation Actions relating to that type of fleet. The Department expects to identify the types of fleets eligible for funding that exist in Pennsylvania and the level of public and private interest that exists in applying for funding and completing mitigation projects with those fleets. This will be a continuous process for Pennsylvania, essentially evaluating necessity, demand, and need.
 5. Sections III.B.5.a-d detail how the Department will group the Eligible Mitigation Actions, and the projects listed under each Eligible Mitigation Action, for the purposes of this Beneficiary Mitigation Plan. The project groups are listed differently in this Section than the Eligible Mitigation Actions are listed in Appendix D-2 of the First Partial Consent Decree. The project groups, however, include all the eligible project types under each Eligible Mitigation Action listed in the group. The First Partial Consent Decree establishes a maximum funding level for each project type but does not establish minimum funding levels.¹² In addition to the project groups, administrative expenditures are discussed in Section III.B.5.e.

a. On-Road Fleet Projects:

This group includes projects listed under the following Eligible Mitigation Actions:

- Class 8 Local Freight Trucks and Port Drayage Trucks;
- Class 4-8 School Bus, Shuttle Bus, or Transit Bus; and
- Class 4-7 Local Freight Trucks.

Pennsylvania expects to request between 20 and 40 percent of the Mitigation Trust funding allocated to Pennsylvania for projects involving on-road fleets in Pennsylvania. The on-road projects include replacements or repowers with new diesel, alternative fuel or electric vehicles and engines (including infrastructure

¹⁰ See Sections III.B.5.a-d of this Beneficiary Mitigation Plan for the Eligible Mitigation Actions that would be included under each grouping.

¹¹ See Section III.B.5.e of this Beneficiary Mitigation Plan.

¹² **The Department is seeking comment on the percentage of Pennsylvania's funding allocation from the Mitigation Trust Fund that should be committed to each of these project groups. See *Pennsylvania Bulletin* notice published on May 20, 2017.**

relating to the electric vehicles and engines). The First Partial Consent Decree establishes the maximum funding levels for these types of projects at between 25-100 percent for eligible project costs. A new funding program will be developed to evaluate these projects for submission to the Trustee.

Some on-road projects eligible under this category may also be eligible for funding under the DERA program, at lower funding levels that are established by DERA. *See* Section III.B.5.c for additional information on DERA-eligible projects.

b. Non-Road/Off-Road Fleet Projects:

This group includes projects listed under the following Eligible Mitigation Actions:

- Freight Switchers; Ferries/Tugs;
- Ocean Going Vessels (OGV) Shorepower;
- Airport Ground Support Equipment; and
- Forklifts and Port Cargo Handling Equipment.

Pennsylvania expects to request between 35 and 55 percent of the Mitigation Trust funding allocated to Pennsylvania for projects involving non-road or off-road fleets in Pennsylvania. Pennsylvania intends to initially apportion the largest share of its Mitigation Trust allocation to non-road or off-road projects because, in general, non-road and off-road repower or replacement projects, specifically those involving rail and marine applications, are significantly more expensive than projects involving on-road fleets. Additionally, non-road or off-road projects tend to result in the most cost-effective and largest emission reductions.¹³

The non-road or off-road projects include replacements or repowers with new diesel, alternative fuel or electric vehicles and engines (including infrastructure relating to the electric vehicles and engines). Some Eligible Mitigation Actions in this group, such as Airport Ground Support Equipment projects, are limited to only electric repowers or replacements. The First Partial Consent Decree establishes the maximum funding levels for these types of projects at between 25-100 percent for eligible project costs. A new funding program will be developed to evaluate these projects for submission to the Trustee.

Some non-road or off-road projects eligible under this category may also be eligible for funding under the DERA program, at lower funding levels that are established by DERA. *See* Section III.B.5.c for additional information on DERA-eligible projects.

c. DERA-eligible Fleet Projects:

This group includes projects listed under several different Eligible Mitigation Actions that are eligible for funding under EPA's DERA programs. The Department has an existing state DERA program – the Pennsylvania State Clean Diesel Grant Program – which has reimbursed grantees for eligible project costs since 2008.¹⁴

¹³ See Section III.D. of this Beneficiary Mitigation Plan for an analysis of potential emission benefits.

¹⁴ Projects from multiple sectors have been funded through the Pennsylvania State Clean Diesel Grant Program, which have included retrofitting school buses, replacing long-haul tractor trailers with alternative fuel vehicles,

Pennsylvania expects to request between 0 and 20 percent of the Mitigation Trust funding allocated to Pennsylvania for DERA-eligible fleet projects. Funds from the Mitigation Trust will be used as Pennsylvania's 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),¹⁵ during the application process to request DERA funding from EPA. Projects eligible under this group include all project types currently allowed under the DERA programs, such as various types of retrofits, repowers, replacements and conversions. DERA-eligible projects are subject to the funding limits established by EPA for the DERA programs. The maximum funding levels for these types of projects range between 25-100 percent for eligible project costs.

There may be some overlap in eligibility for funding under the four project groups, with different applicant funding match requirements depending on the funding programs. Some projects included in the On-Road and Non-Road/Off-Road groupings are also eligible for funding through the Pennsylvania State Clean Diesel Grant Program, albeit at lower funding levels than those established by the First Partial Consent Decree. One example of this is a project to replace an existing diesel bus with an electric bus. Under the terms of the First Partial Consent Decree, this type of replacement project is eligible for funding ranging from a maximum of 75 percent for eligible project costs for privately-owned buses, or 100 percent for eligible project costs if the bus is government-owned. Under the Pennsylvania State Clean Diesel Grant Program (DERA), this bus replacement project would be eligible for maximum funding of 25 percent for eligible project costs; the applicant would be responsible for at least 75 percent of project costs.

In the DERA-eligible fleet group, both the Eligible Mitigation Actions already included under DERA programs, as well as all other projects allowed under DERA programs are eligible for funding under the Pennsylvania State Clean Diesel Grant Program.

d. Light-Duty Zero Emission Vehicle Supply Equipment:

This group includes the projects listed in paragraph 9 of Appendix D-2 of the First Partial Consent Decree. These projects relate to light-duty zero emission vehicle (ZEV) supply equipment, including public and private electric vehicle charging equipment and hydrogen fuel cell refueling equipment. The First Partial Consent Decree identifies six specific 'stand-alone' recharging/refueling setups that are eligible for funding. The First Partial Consent Decree establishes the maximum funding levels for these types of projects at between 25-100 percent for eligible project costs. The light-duty ZEV supply equipment projects are not linked to the electric vehicle/equipment replacement or repower projects listed in paragraphs 1-8 of Appendix D-2. The ZEV supply equipment projects are also restricted to light-duty

replacing diesel transit buses with hybrid buses, replacing diesel airport ground support equipment with electric equipment, electrifying truck parking spaces, and many other projects.

¹⁵ Appendix D-2 of First Partial Consent Decree, Paragraph 10.

vehicle recharging/refueling locations, and do not include recharging/refueling locations for medium- or heavy-duty vehicles or equipment. Pennsylvania expects to request 15 percent of the Mitigation Trust funding allocated to Pennsylvania for light-duty ZEV supply equipment projects.

Pennsylvania may favor projects from applicants that apply for and do not receive funding through VW's National ZEV Investment¹⁶, if those projects are Eligible Mitigation Actions, or eligible projects that support a larger project funded under the VW National ZEV Investment.

e. Administrative Costs:

Pennsylvania will apply up to 15 percent of its allocation from the Mitigation Trust funds for actual administrative expenditures associated with implementing Eligible Mitigation Actions. Pennsylvania's administrative costs will be calculated as a portion of the project costs for each project approved for funding by the Trustee, and will be apportioned out of, not in addition to, the funding percentages allocated to the groups in Section III.B.5.a-d. Administrative expenditures may include personnel costs, fringe benefit costs, supply costs, contractual costs and other eligible costs. The 15 percent cap includes the aggregated amount of eligible administrative expenditures incurred by Pennsylvania and any third-party contractor(s).

C. A Description of how the Beneficiary Will Consider the Potential Beneficial Impact of the Selected Eligible Mitigation Actions on Air Quality in Areas that Bear a Disproportionate Share of the Air Pollution Burden within their Jurisdiction

1. The Department has identified several types of areas that tend to bear a disproportionate share of the air pollution burden, referred to in this Beneficiary Mitigation Plan as "priority areas." Priority areas include areas designated nonattainment for a NAAQS, high pollution areas, environmental justice areas, and brownfields.
 - a. NAAQS Nonattainment – Several areas throughout the Commonwealth are not attaining the federal NAAQS for ozone and PM_{2.5}. While all areas of the state are currently in attainment of the NO₂ NAAQS,¹⁷ oxides of nitrogen (NO_x) are a precursor pollutant for both ozone and PM_{2.5}, for which there are several nonattainment areas. A list of EPA-designated NAAQS nonattainment areas in Pennsylvania is available on the following web site: <https://www.epa.gov/green-book>. Pennsylvania also maintains an 'Attainment Status' website here: <http://www.dep.pa.gov/Business/Air/BAQ/Regulations/Pages/Attainment-Status.aspx>.

¹⁶ See Appendix B of the First Partial Consent Decree.

¹⁷ As of December 2016. See EPA's "Nonattainment Areas for Criteria Pollutants (Green Book)," available at <https://www.epa.gov/green-book>. The EPA Green Book provides detailed information about NAAQS designations, classifications, and nonattainment status. Information is current as of the date indicated on EPA's "Green Book" webpage. EPA provides the information in reports and maps and as data downloads.

- b. Brownfields and Environmental Justice Areas – The Department also considers brownfields and environmental justice areas to be areas that tend to bear a disproportionate share of the air pollution burden.
 - 1) ‘Brownfields’ are defined by EPA as a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Residents in and around brownfields may be exposed to a disproportionate share of the air pollution.
 - 2) The Department defines an ‘environmental justice area’ as any census tract where 20 percent or more individuals live in poverty, and/or 30 percent or more of the population is minority.¹⁸ Environmental justice areas are priority areas because these areas usually include communities and/or populations that are more adversely, disproportionately and/or historically impacted by environmental issues and problems than other communities because of geography, poverty, income levels and similar types of factors. The Department’s Environmental Justice website can be found here: <http://www.dep.pa.gov/PublicParticipation/OfficeofEnvironmentalJustice/Pages/default.aspx>. This website provides both a link to a statewide map of Environmental Justice areas, as well as a tool to map individual Environmental Justice areas.
 - c. High Pollution Areas – The following types of locations, and the surrounding areas, may be considered high pollution areas: ports, rail yards, terminals, distribution centers, truck stops, construction sites, and bus yards or depots.
2. Pennsylvania plans to focus its mitigation project solicitation efforts on the types of priority areas discussed above. The Department has several ways to prioritize projects in priority areas.
 - a. Under competitive grants¹⁹, extra points can be awarded during scoring for projects located in or near a priority area. The Pennsylvania State Clean Diesel Grant Program under DERA currently awards points in this manner. Any new competitive grant program would include a similar scoring methodology.
 - b. In most cases, non-competitive funding programs do not include a scoring process. As a result, the Department must take a different approach for prioritizing projects in priority areas when no scoring is involved in the application process. For rebate programs, sole-source grant awards, and other non-competitive funding methods, the Department can limit eligibility to projects located in or operating in these priority areas.

¹⁸ Pennsylvania Environmental Justice Areas:
<http://www.dep.pa.gov/PublicParticipation/OfficeofEnvironmentalJustice/Pages/PA-Environmental-Justice-Areas.aspx>.

¹⁹ See Section V.A. of this Beneficiary Mitigation Plan for a discussion of the funding mechanisms available to the Department.

D. A General Description of the Expected Ranges of Emission Benefits the Beneficiary Estimates would be Realized by the Implementation of the Eligible Mitigation Actions Identified in the Beneficiary Mitigation Plan

To develop an estimate of the expected ranges of emission benefits resulting from implementation of the actions identified in this Beneficiary Mitigation Plan, the Department used a representative sample of project types that are expected to apply for funding under each group described above in Section III.B.5.a-d of this Beneficiary Mitigation Plan. Actual emission reductions achieved will depend on what types of projects apply for funding, how many projects apply for funding, which projects Pennsylvania submits to the Trustee for funding, and which projects are approved by the Trustee to receive funding.

For this analysis, the Department made the following assumptions about the amount of funding allocated to each of the groups identified in Sections III.B.5.a-d, above, from the total Mitigation Trust funds allocated to Pennsylvania: 30 percent for on-road fleet projects, 45 percent for non-road/off-road fleet projects, 10 percent for DERA-eligible fleet projects, and 15 percent for light-duty zero emission vehicle supply equipment projects. These funding allocations were used only to conduct the emission reduction analysis presented in this subsection. The use of these allocations for this analysis does not indicate a commitment to using the same funding allocations in the final Plan. This analysis will be conducted again using the final funding percent allocations to the groups identified in the final Mitigation Plan. The analysis may also be revised in a future year of the term of the Trust Agreement to reflect changes to the funding percent allocations to the groups, as needs and market demands change.

1. On-Road Fleet Projects – The Department analyzed a sample of eligible projects that included replacing Class 5 trucks, Class 8 trucks, and Class 8 drayage trucks with diesel replacements, as well as replacing school buses and transit buses with diesel, propane, compressed natural gas and electric versions. The estimated total lifetime emission reductions from this group are approximately 440 tons of NO_x.
2. Non-Road Fleet Projects – The Department analyzed a sample of eligible projects that included repowering tugboats, freight switchers, airport ground support equipment (GSE), and forklifts, as well as electric recharging stations for GSE and forklifts. The estimated total lifetime emission reductions from this group are approximately 32,000 tons of NO_x.
3. DERA-eligible Fleet Projects – The Department analyzed a sample of eligible projects that included replacements of school buses, short-haul trucks, transit buses, and construction equipment with diesel replacements. The estimated total lifetime emission reductions from this group are approximately 720 tons of NO_x.
4. Light-duty Zero Emission Vehicle Supply Equipment – The Department used data showing the cost per ton of NO_x reduced by a light-duty ZEV electric charging station

and estimates of costs for various station types to determine potential total lifetime emission reductions from use of this equipment, which are approximately 12 tons of NO_x.

5. In total, the Department estimates that applying the entire amount of funding allocated to Pennsylvania under the PCDs (\$118,569,539.52) to fund the Eligible Mitigation Actions under this Beneficiary Mitigation Plan using the percent allocations noted above in Section III.D. will result in total lifetime emission reductions of approximately 33,000 tons of NO_x. As stated above, actual emission reductions are dependent on the types of projects that apply for funding, how many projects apply for funding, and which projects are approved by the Trustee to receive funding.

IV. Public Input Element of Pennsylvania's Beneficiary Mitigation Plan

In addition to the elements described in Section III of this Beneficiary Mitigation Plan, Section 4.1 of the Trust Agreement (Appendix D of the First Partial Consent Decree) also requires that the Beneficiary Mitigation Plan explain the process by which the Beneficiary shall seek and consider public input on its Beneficiary Mitigation Plan.

This section describes the public input process the Department will implement to inform the development of this Beneficiary Mitigation Plan, as well as the public input process to be employed when revising this Beneficiary Mitigation Plan. In order to provide transparency and accountability, the Department will post information on its VW website, <http://www.dep.pa.gov/Business/Air/Volkswagen/Pages/default.aspx>, which is further described in the section, below.

- A. Public Input** – The Department will seek public input on the Beneficiary Mitigation Plan through the following public participation process. Pennsylvania anticipates that it will follow a similar process for future major revisions to the Beneficiary Mitigation Plan.
 1. Draft Beneficiary Mitigation Plan – Notice of the opportunity for public comment on the Beneficiary Mitigation Plan will be published in the *Pennsylvania Bulletin* before the Beneficiary Mitigation Plan is finalized and submitted to the Trustee. The Department may also share the information in the *Pennsylvania Bulletin* notice through various public and industry outreach methods. The draft Beneficiary Mitigation Plan will also be available for public review on the Department's VW website, <http://www.dep.pa.gov/Business/Air/Volkswagen/Pages/default.aspx>.
 2. Public Informational Meetings and Comments – The *Pennsylvania Bulletin* notice will include information about submitting comments during a 45-day public comment period and details for public informational meetings and a webinar that will be held concerning the draft Beneficiary Mitigation Plan.
 3. Final Beneficiary Mitigation Plan – The Department will consider all comments received, review any new or revised requirements the Trustee develops, make any relevant revisions, and post the final Beneficiary Mitigation Plan on the Department's VW website, <http://www.dep.pa.gov/Business/Air/Volkswagen/Pages/default.aspx>, described

below. The final Beneficiary Mitigation Plan will also be available by calling the Department at (717) 787-9495. After revisions, the final Beneficiary Mitigation Plan will be submitted to the Trustee of the Mitigation Trust.

B. Periodic Evaluation – The Department will periodically evaluate implementation of the Beneficiary Mitigation Plan and implementation of the Eligible Mitigation Actions after the initial round of funding and will determine whether any revisions to the Beneficiary Mitigation Plan and funding levels are appropriate or necessary. If future revisions to the Beneficiary Mitigation Plan are necessary, the Department intends to seek public input on major Plan revisions generally consistent with the process outlined above, including publishing a notice of the opportunity for public comment and providing a 30-day public comment period regarding the proposed revisions.

C. Department VW Website – The Department has created a public website as a clearinghouse for information relating to the VW Partial Consent Decrees, Pennsylvania’s plans, and implementation information, which can be accessed at: <http://www.dep.pa.gov/Business/Air/Volkswagen/Pages/default.aspx>. Information relating to both the Mitigation Trust and VW’s ZEV Investment Plan will be posted here. The Department will post the following:

1. General information on the Partial Consent Decrees, including a link to the documents;
2. Pennsylvania’s draft and final Beneficiary Mitigation Plans, including information about the public participation process for the Beneficiary Mitigation Plan;
3. Information about new and existing funding programs the Department uses to distribute funding from the Mitigation Trust;
4. All public records supporting funding requests the Department submits to the Trustee, and all public records supporting all expenditures of the Trust Fund, subject to confidentiality laws and until the Termination Dates of the Partial Consent Decrees;
5. Department contact information; and
6. Information about VW’s National ZEV Investment Plan:
 - a. The Department does not submit requests for project funding under the National ZEV Investment Plan; it can only make suggestions for projects.
 - b. VW will select the final projects in coordination with EPA.
 - c. The Department may provide links to the project submission portal established by VW and EPA and may provide technical assistance or support for proposal development.

V. Project Planning

This section identifies the mechanisms available to the Department to fund projects and the potential local, state, and regional partners that can work with the Department on educational outreach and project development. All programs the Department develops under this Beneficiary Mitigation Plan will be designed to:

- Be consistent with all requirements of the Trust Agreement;
- Require appropriate documentation to ensure accountability; and
- Comply with the Commonwealth's laws, regulations, and policies.

A. Funding Mechanisms

All funding award decisions are made by the Trustee. The Commonwealth will employ funding mechanisms and programs to determine which projects are submitted to the Trustee for a final decision on funding.

1. The Department may use a variety of funding mechanisms to evaluate funding requests for the Eligible Mitigation Actions, including:
 - a. Competitive grant awards – Funds awarded based on scoring of specific criteria;
 - b. Sole-source grant awards – Funds awarded based on restrictions of location, product, service, or time;
 - c. Rebate programs – Funds awarded based on proof of purchase of a specific product or service;
 - d. Pilot projects – Funds awarded in a variety of formats, subject to Pennsylvania's Air Pollution Control Act; and
 - e. Memoranda of Understanding or Letters of Understanding (MOU/LOU) – Funds awarded as an agreement between the Department and other state agencies or local governments.
2. The Department will determine the most appropriate funding mechanism and programs to evaluate proposals for Eligible Mitigation Actions and will modify existing or develop new programs to evaluate eligible projects for the Mitigation Trust. The Department will incorporate any eligibility requirements contained in the Partial Consent Decrees into existing programs and into new programs as they are developed.

B. Project Partners

In addition to the general public, the Department has identified several organizations as potential project partners within the Commonwealth, regionally, and nationally. The Department may work with these organizations on educational outreach and eligible project

development. **Organizations other than those listed here may also be considered as partners.**

1. Commonwealth Partners – The Department may partner with organizations within the Commonwealth to identify and complete projects. Below are examples of the types of organizations within the Commonwealth that may have experience in participating in grant or other funding programs, are linked to government agencies, and/or have knowledge of local fleets and interest in Eligible Mitigation Actions within their jurisdictions. Organizations other than those listed here may also be considered as partners.
 - a. Other state agencies;
 - b. Local air pollution control agencies (Air Management Services/City of Philadelphia (AMS) in the Philadelphia area and Allegheny County Health Department (ACHD) in the Pittsburgh area);
 - c. Municipal governments and authorities;
 - d. Metropolitan and rural planning organizations (Delaware Valley Regional Planning Commission (DVRPC) in the Philadelphia area, Southwest Pennsylvania Commission (SPC) in the Pittsburgh area, and numerous others throughout the state);
 - e. Environmental advocacy groups; and
 - f. Clean transportation advocacy groups.
2. Regional and National Partners – The Department may partner with regional and national organizations located outside of the Commonwealth. Below are examples of organizations that may be useful to identify and complete projects involving vehicles or equipment involved in interstate transport or multi-state transportation corridors, such as rail projects, port projects, airport projects, and light-duty ZEV supply equipment development. Organizations other than those listed here may also be considered as partners.
 - a. The Mid-Atlantic Regional Air Management Association (MARAMA);
 - b. The Mid-Atlantic Diesel Collaborative;
 - c. The National Association of Clean Air Agencies (NACAA); or
 - d. Other states.
3. Business and Industry Partners – In addition to public and non-profit organizations, the Department may also partner with private businesses or industry groups that have an interest in or information about the Eligible Mitigation Actions.

VI. Conclusion

This Beneficiary Mitigation Plan has been developed in accordance with the terms of the First and Second Partial Consent Decrees. This Beneficiary Mitigation Plan:

- Summarizes Pennsylvania's goals for the use of the funds from the Mitigation Trust;
- Identifies the Eligible Mitigation Actions under which Pennsylvania will evaluate projects for submission to the Trustee. The final Beneficiary Mitigation Plan will identify the percent of funding allocated for each type of Eligible Mitigation Action;
- Describes how the Department considered the potential beneficial impact of the selected Eligible Mitigation Actions on air quality in priority areas;
- Describes ranges of anticipated emission benefits from implementation of the Beneficiary Mitigation Plan; and
- Outlines the public input process for the draft Beneficiary Mitigation Plan.

This Beneficiary Mitigation Plan is not a solicitation for projects. As such, this Beneficiary Mitigation Plan does not include detail on the application or project selection process. Such information will become available on the Department's VW website after the final Beneficiary Mitigation Plan has been submitted to the Trustee.

As part of periodic evaluations, the Department may revise the final Beneficiary Mitigation Plan as necessary to reflect major changes in market demand, the Commonwealth's priorities or available funds in future years.