



~~Request for Comments~~

**VOLKSWAGEN CONSENT DECREE  
ENVIRONMENTAL MITIGATION TRUST**

**~~DRAFT~~  
INDIANA BENEFICIARY MITIGATION PLAN  
(~~August-October~~ 2018)**

~~Deadline for Submissions:  
September 28, 2018~~

**Volkswagen Mitigation Trust Questions:**

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# Volkswagen Consent Decree Environmental Mitigation Trust

## Beneficiary Mitigation Plan

### Statement of Purpose

The State of Indiana (State), through the Indiana Department of Environmental Management (IDEM), ~~requests comments onis submitting~~ this ~~Draft~~ Beneficiary Mitigation Plan, as referenced in the [Third Partial Settlement and Consent Decree](#) along with the latest filing regarding the [Environmental Mitigation Trust for State Beneficiaries](#).

### Background

The settlement establishes a Mitigation Trust to be used for environmental mitigation projects that reduce emissions and improve air quality. The funding for the Eligible Mitigation Actions is intended to fully mitigate the total, lifetime excess oxides of nitrogen (NOx) emissions from vehicles involved in the case. The trust provides approximately \$41 million for Indiana; the funds are to be used during a 10 year period for specific, eligible projects designed to achieve these results.

The State must submit a Beneficiary Mitigation Plan for approval in order to access the trust funds. The comments collected through this process ~~will bewere~~ used to inform the Final Beneficiary Mitigation Plan submitted for approval by the Trustee.

The State must address the following details in developing the Beneficiary Mitigation Plan:

- The “high-level vision for use of the mitigation funds.”
- The overall goal for the use of the funds.
- The categories of Eligible Mitigation Actions appropriate to achieve the stated goals and a preliminary assessment of the percentage of funds appropriate for each category of mitigation action.
- A description of how the State will measure the potential beneficial impact of Eligible Mitigation Actions on air quality in areas that bear a disproportionate share of the air pollution burden.
- A general description of the expected ranges of emission benefits that would be realized by implementation of the Beneficiary Mitigation Plan.

### Eligible Projects

The eligible projects are specified in Appendix D-2 of the settlement and more specific details about these projects as well as funding caps allowed under the national mitigation trust can be found on [Indiana’s Volkswagen Mitigation Trust Program](#) website. The broad categories of project types allowed are:

- Repower or Replace Class 8 local freight trucks and port drayage trucks
  - Model Year 1992 - 2009
- Repower or Replace Class 4-8 school buses, shuttle buses or transit buses
  - Model year ~~1992—~~2009 and older
- Repower or Replace Class 4-7 local freight trucks
  - Model year 1992 - 2009

- Repower or Replace Diesel switcher locomotives
  - Pre-Tier 4 engines and operated over 1,000 hours per year
- Repower of eligible diesel-powered ferries and tugs
  - Pre-Tier 3 engines
- Shorepower equipment for oceangoing vessels and vessels operating within the Great Lakes
- Repower of eligible diesel-powered airport ground support equipment
  - Pre-Tier 3 engines
- Repower of eligible forklifts and port cargo handling equipment
  - Greater than 8,000 pounds lifting capacity
- Light duty zero emission vehicle supply equipment
  - Level 1, Level 2, and Fast Charging
- Matching funds for DieselWise Indiana's U.S. Environmental Protection Agency (U.S. EPA) state allocation funding under the Diesel Emission Reduction Act (DERA)
  - DERA eligibility and match requirements must be met

Eligibility is outlined in the national mitigation trust and to help create regional consistency IDEM will coordinate with other Midwest Clean Diesel Initiative partner states (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin) where necessary. Ambiguities in eligible projects under the Indiana Volkswagen Mitigation Trust Program will not be addressed at this time.

### **Request for Comments**

~~Indiana citizens and stakeholders are being invited to specifically consider and comment on the allocations, match requirements, and more contained in the following Draft Beneficiary Mitigation Plan. It is these comments that will provide the insight necessary to develop and sustain the success of the Indiana Volkswagen Mitigation Trust Program across Indiana.~~

### **Submissions**

~~Comments responsive to this Draft BMP should be sent to:~~

~~Indiana Volkswagen Mitigation Trust  
[VWTrust@idem.IN.gov](mailto:VWTrust@idem.IN.gov)~~

### **Program Questions**

Questions specific to Indiana's Volkswagen Mitigation Trust Program should be sent to:

Mr. Shawn M. Seals  
 Indiana Department of Environmental Management  
 (317) 233-0425  
[SSeals@idem.IN.gov](mailto:SSeals@idem.IN.gov)

~~Indiana Volkswagen Mitigation Trust  
[VWTrust@idem.IN.gov](mailto:VWTrust@idem.IN.gov)~~

~~Submission deadline is TBD~~

**Indiana Department of Environmental Management  
Volkswagen Environmental Mitigation Trust  
Draft Beneficiary Mitigation Plan**

## **Introduction**

The following proposal is in response to the approximate \$40.9 million Indiana is poised to receive in settlement funds under the [Third Partial Settlement and Consent Decree](#) along with the latest filing regarding the [Environmental Mitigation Trust for State Beneficiaries](#). Appendix D-2 of the Environmental Mitigation Trust for Beneficiaries specifies eligible mitigation actions and expenditures for the Mitigation Trust Fund and is incorporated into this document as Appendix B. On October 4, 2017, the Governor of the State of Indiana, through an Executive Order designated IDEM as the Beneficiary to administer this program on behalf of the State of Indiana and established an Advisory Committee. IDEM, in coordination with the Advisory Committee, proposes to implement the following strategy to reduce nitrogen oxides (NOx) emissions in Indiana.

Consistent with the terms of the national mitigation trust, this Beneficiary Mitigation Plan is intended to provide the public with an overview of Indiana's goals and objectives for the use of mitigation trust funds. NOx is a precursor to ozone and is the pollutant required to be to be mitigated through the Indiana Volkswagen Mitigation Trust Program by the national mitigation trust. IDEM proposes to prioritize (in part) the use of the settlement funds to reduce NOx emissions, as well as fine particulate matter (PM<sub>2.5</sub>) emissions, in areas of concern across Indiana to the extent possible. IDEM is encouraging all areas of the state to apply for funds to improve air quality across the state through repowers or the early replacement of other vehicles and equipment.

The national mitigation trust clearly defines the minimum requirements of a Beneficiary Mitigation Plan. In short, these key elements are:

- Describe the overall goal for the use of the funds.
- Identify the categories and provide a preliminary assessment of percentages of eligible mitigation actions (EMAs) that are anticipated by the Beneficiary to be used to achieve the stated goal for the use of the funds.
- Describe how the Beneficiary will consider potential beneficial impacts of the EMAs on air quality in areas that bear a disproportionate share of the air pollution burden.
- A general description of the expected ranges of emission benefits that would be realized by implementation of the Beneficiary Mitigation Plan.
- The Beneficiary Mitigation Plan need only provide the level of detail reasonably ascertainable at the time of submission in regards to the overall program and is intended to provide the public with insight into a Beneficiary's high-level vision for the use of the national mitigation trust funds and information about the specific uses for which funding is expected to be requested.

This Beneficiary Mitigation Plan addresses these key elements, and many others, throughout the document and is organized in a way to provide the greatest amount of information in the clearest possible way.

## **Elements of Indiana's Volkswagen Mitigation Trust Program**

IDEM is proposing to distribute the EMAs permitted by the national mitigation trust into five groups to streamline the process for applicants and create a more equitable means by which the merits of

projects will be evaluated against each other. The types of projects included with this proposal are durable, sustainable solutions for the long-term benefit of Indiana communities. ~~Project outcomes will be quantified with the U.S. EPA's Diesel Emissions Quantifier (DEQ) or other appropriate methodology that will be clarified in the solicitation for projects packet that will come at a later date.~~

## **Mission Statement and Overall Goals**

In promoting the reduction of emissions of nitrogen oxides, the Indiana Volkswagen Environmental Mitigation Trust Fund Program will prioritize sustainable projects that are transformative, positively impacting the environment, enhancing the health and well-being of residents, and promoting Indiana's growing economy.

The Program will focus on technological change and advancement with resiliency and favoring use of domestic fuel, where possible.

The goals of the Indiana Volkswagen Mitigation Trust Program include:

- Improve air quality across Indiana through cost-effective NOx emission reduction strategies
- Maximize diesel emission reductions across Indiana, while considering various categories of sensitive populations as areas of specific focus
- Appropriate considerations to projects that have diesel emission reductions that go beyond just NOx, including PM<sub>2.5</sub>, hydrocarbons (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>)
- Encourage leveraging of project partner funds with VW Trust funds to further the reach of the Indiana program

## **Grouping of Eligible Mitigation Actions**

Appendix D-2 of Attachment A to the Environmental Mitigation Trust Agreement for State Beneficiaries details the projects that are eligible under the national mitigation trust. These projects types are as follows:

- Class 8 local freight trucks and port drayage trucks.
- Class 4-8 school/shuttle/transit buses.
- Freight switcher locomotives.
- Ferries/tugboats.
- Ocean and lake going vessels shorepower.
- Class 4-7 local trucks.
- Airport ground support equipment.
- Forklifts and cargo handling equipment at ports.
- Light duty zero electric vehicle supply equipment (up to 15% of allocation).
- Diesel Emission Reduction Act (DERA) option.
  - Option to use trust funds for actions not specifically listed but otherwise eligible under DERA.
- Beneficiary Administrative Costs

To ease the application process and create parity in project scoring, evaluation, and selection, so that similar projects are scored and evaluated together, IDEM will organize the EMAs listed above into five groups. These groups are as follows:

- Onroad Equipment and Vehicles
  - Projects such as Class 4-8 trucks and Class 4-8 school, shuttle, and transit buses
- Nonroad Equipment and Vehicles
  - Projects such as airport ground support equipment, forklifts and port cargo handling equipment, ferries and tugboats, and freight-switcher locomotives
- DERA Option Project Types
  - Projects such as idle reduction technologies, diesel engine Repower and Replacements using fuel options not permitted under Volkswagen, diesel engine upgrades, and exhaust after-treatments
- Light-Duty Electric Infrastructure
  - Projects such as Level 1, Level 2, and Fast Charging stations across Indiana (not to be confused with heavy-duty electric infrastructure)
- Administrative Costs
  - Costs such as IDEM staff, outreach materials where appropriate, and appropriate Advisory Committee expenses

~~IDEM presented percentage allocation, set-aside, and match requirement recommendations based on public input to the Volkswagen Mitigation Trust Fund Advisory Committee at meetings held on May 2, 2018 and June 4, 2018. At the June 4, 2018 meeting the Advisory Committee made changes to IDEM's allocation percentage recommendations. The Advisory Committee recommended a decrease in allocation percentages to the Nonroad Equipment and Vehicle Group (-2%) and the DERA Option Group (-6%) with a subsequent increase to the Onroad Equipment and Vehicle Group (+8%). The Advisory Committee did not suggest alterations to the set-aside or match requirements recommended by IDEM at the June 4, 2018, meeting. These recommendations with revised allocation percentages are detailed below for public consideration and comment.~~

## **Onroad Equipment and Vehicles**

The onroad equipment and vehicles group includes Class 4-8 trucks and Class 4-8 school, shuttle, and transit buses. Equipment or vehicles in this group must be Indiana-owned and operated to be eligible for funding. IDEM intends to allocate approximately ~~58XX%~~ (~\$~~23XX.X~~78 million) to projects within this group. In IDEM's initial request for information, only one other EMA received more supportive comments than school buses. As such, IDEM intends to set aside approximately ~~40XX%~~ (~\$~~9X.XX~~54 million) of the onroad group funds for school buses, with an additional set-aside of roughly ~~30XX%~~ of the school bus allotment (~\$~~2X.XX~~85 million) for electric school bus projects. The set-asides for diesel, alternative fuel, and/or electric school buses are intended to provide a minimum reserved level of funding for these project types. The remaining 60% (~\$14.27 million) of the onroad equipment and vehicles group will go to all other Class 4-8 trucks and buses.

~~It should be noted that IDEM does not intend to fund fleet specific, heavy duty, electric infrastructure costs. Rather, IDEM will focus the Indiana Volkswagen~~

~~Mitigation Trust Program funds on equipment and vehicle repower and replacement projects.~~

## **Nonroad Equipment and Vehicles**

The nonroad equipment and vehicles group includes airport ground support equipment, forklifts and port cargo handling equipment, lake or river ferries and tugboats, and freight-switcher locomotives. Equipment or vehicles in this group must be Indiana-based, meaning they must operate primarily within state boundaries but may be owned by non-Indiana entities. IDEM intends to allocate approximately 20% (~\$8.2 million) to projects within this group.

~~It should be noted that IDEM does not intend to fund fleet specific, heavy duty, electric infrastructure costs. Rather, IDEM will focus the Indiana Volkswagen Mitigation Trust Program funds on equipment and vehicle repower and replacement projects.~~

### ***~~Onroad and Nonroad Equipment and Vehicles Match Requirements~~***

~~———— IDEM proposes to use Volkswagen Mitigation Trust funds to reimburse non-government owned fleet and equipment owners in these categories at the levels specified in Appendix D-2 of the national mitigation trust. IDEM intends to use Volkswagen Mitigation Trust funds to reimburse government-owned fleets and equipment at the same level as non-government owned fleet and equipment owners, as opposed to the full cost reimbursement permitted by Appendix D-2. Lastly, IDEM intends to use Volkswagen Mitigation Trust funds to reimburse both non-government and government owned fleet and equipment owners at a lower level (require 5% more cost-share from applicant) for electric-powered equipment and vehicles.~~

### **Onroad and Nonroad Fleet Specific Infrastructure**

Although permitted by Appendix D-2 of the Consent Decree, it should be noted that IDEM does not intend to fund fleet specific, heavy duty, electric infrastructure costs as doing so creates an inequity towards other diesel or alternative fuel types. Rather, IDEM will focus the Indiana Volkswagen Mitigation Trust Program funds on equipment and vehicle repower and replacement projects. In addition, not funding electric vehicles as well as electric infrastructure promotes funding of projects where both private and public entities have a vested interest in sustaining a new energy platform.

## **DERA Option Project Types**

The DERA Option of the Indiana Volkswagen Mitigation Trust Program provides funding opportunities for impactful diesel emission reduction projects that are not specifically eligible under the national mitigation trust. The DERA Option allows Beneficiaries to use Volkswagen Mitigation Trust funds to match (or over-match) DERA-based programs funding through the U.S. EPA. This provides flexibility to fund high-impact projects that might include idle reduction technologies, diesel engine repower and replacement projects using fuel types not eligible under the Volkswagen Mitigation Trust, diesel engine upgrades, and exhaust after-treatments not otherwise

permitted under the constraints of the national mitigation trust. IDEM intends to allocate ~~4X%~~ (~\$~~1X.XX64~~ million) to projects in the DERA Option group.

~~Unlike other projects funded through the Indiana Volkswagen mitigation Trust Program the match requirements for the DERA option group will be based on the most current U.S. EPA State Allocation program guidelines.~~

Consistent with other diesel emission reduction project groups, onroad project fleets must be Indiana-owned and nonroad project fleets must be Indiana-based.

## **Light-Duty Electric Vehicle Infrastructure**

The national mitigation trust provides the Beneficiaries the opportunity to set aside up to 15% light-duty electric infrastructure development. IDEM provided the public an opportunity to comment on an initial draft program framework document for the development of a revised Beneficiary Mitigation Plan. More favorable comments were received for funding light-duty electric infrastructure than any other. With the hope of meeting this call, IDEM intends to allocate the maximum of 15% (~\$6.15 million) to Level 1, Level 2, and Fast Charging light-duty electric infrastructure equipment. IDEM recognizes that Fast Charging equipment may be preferred by many, but is choosing to keep the options open to allow project partners to determine the best technology for their specific project.

~~IDEM intends to use Volkswagen Mitigation Trust funds to reimburse non-government owned light-duty electric vehicle infrastructure costs at the levels specified in Appendix D-2 of the national mitigation trust. IDEM intends to use Volkswagen Mitigation Trust funds to reimburse government-owned light-duty electric vehicle infrastructure at the same level as non-government-owned equipment.~~

IDEM recognizes that another component of the overall Volkswagen Consent Decree authorizes similar funding for light-duty electric vehicle infrastructure; known as Electrify America. To the extent possible, IDEM will coordinate with the Electrify America program to reduce or remove any duplicate efforts.

## **Administrative Costs**

Administrative costs for Beneficiaries are eligible under the national mitigation trust. These funds can be used for costs associated with project management and oversight by the Beneficiary. The national mitigation trust does not allow funding for administrative costs to applicants or their contractors. Although Beneficiaries are permitted to claim up to 15% of the total program costs, IDEM intends to allocate 3% (~\$1.23 million) to cover staff costs along with limited costs incurred by the Advisory Committee.

It should be noted that the national mitigation trust allows IDEM from 3 to 10 years to complete the terms of the Indiana Volkswagen Mitigation Trust Program. This range of 3 to 10 years for full implementation of this program provides ample opportunity for participation through multiple annual solicitations for projects.

## **Indiana Volkswagen Mitigation Trust Program Match Requirements**

IDEM proposes to use Volkswagen Mitigation Trust funds to reimburse non-government owned fleet and equipment owners in these categories at the levels specified in Appendix D-2 of the national mitigation trust. IDEM intends to use Volkswagen Mitigation Trust funds to reimburse government-owned fleets and equipment at the same level as non-government owned fleet and equipment owners, as opposed to the full cost reimbursement permitted by Appendix D-2.

<b>Project Type</b>	<b>VW Funding</b>
<b>1a) Class 8 Local Freight (1992-2009)</b>	
<u>Repowers with new diesel or alternative fueled engines, including costs of installation</u>	<u>Up to 40% covered</u>
<u>Replacement with new diesel or alternative fueled vehicle</u>	<u>Up to 25% covered</u>
<u>Repowers with all-electric engine, including cost of installation of engine</u>	<u>Up to 75% covered</u>
<u>Replacement with new all-electric vehicle</u>	<u>Up to 75% covered</u>
<b>1b) Class 8 Drayage (1992-2009)</b>	
<u>Repowers with new diesel or alternative fueled engines, including costs of installation</u>	<u>Up to 40% covered</u>
<u>Replacement with new diesel or alternative fueled vehicle</u>	<u>Up to 50% covered</u>
<u>Repowers with new all-electric engine</u>	<u>Up to 75% covered</u>
<u>Replacement with new all-electric vehicle</u>	<u>Up to 75% covered</u>
<b>2) Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses) (??-2009)</b>	
<u>Repowers with new diesel or alternative fueled engines, including costs of installation</u>	<u>Up to 40% covered</u>
<u>Replacement with new diesel or alternative fueled vehicle</u>	<u>Up to 25% covered</u>
<u>Repowers with all-electric engine, including cost of installation of engine</u>	<u>Up to 75% covered</u>
<u>Replacement with new all-electric vehicle</u>	<u>Up to 75% covered</u>
<b>3) Freight Switcher (Pre-Tier 4 engines to Tier level of mitigation action year)</b>	
<u>Repowers with new diesel or alternative fueled engines or generator sets, including costs of installation</u>	<u>Up to 40% covered</u>
<u>Replacement with new diesel or alternative fueled freight switcher</u>	<u>Up to 25% covered</u>
<u>Repowers with new all-electric engines, including costs of installation of engines</u>	<u>Up to 75% covered</u>
<u>Replacement with new all-electric freight switcher</u>	<u>Up to 75% covered</u>
<b>4) Ferries/Tugs (Unregulated, Tier 1 or Tier 2 Marine to Tier 3 or Tier 4)</b>	
<u>Repowers with new diesel or alternative fueled engines, including costs of installation</u>	<u>Up to 40% covered</u>
<u>Repowers with new all-electric engines, including costs of installation of engines</u>	<u>Up to 75% covered</u>

<b><u>5) Ocean Going Vessels Shorepower</u></b>	
<u>Costs associate with the shore-side system, including cables, cable management systems, shore power coupler systems, distribution control systems, installation and power distribution components</u>	<u>Up to 25% covered</u>
<b><u>6) Class 4-7 Local Freight Trucks (Medium Trucks) (1992-2009)</u></b>	
<u>Repowers with new diesel or alternative fueled engines, including costs of installation</u>	<u>Up to 40% covered</u>
<u>Replacement with new diesel or alternative fueled vehicle</u>	<u>Up to 25% covered</u>
<u>Repowers with all-electric engine, including cost of installation of engine</u>	<u>Up to 75% covered</u>
<u>Replacement with new all-electric vehicle</u>	<u>Up to 75% covered</u>
<b><u>7) Airport Ground Support Equipment (Tier 0, Tier 1, Tier 2, Uncertified or Certified 3g/bhp-hr or higher emissions)</u></b>	
<u>Repowers with all-electric engine, including cost of installation of engine</u>	<u>Up to 75% covered</u>
<u>Replacement with new all-electric ground support equipment</u>	<u>Up to 75% covered</u>
<b><u>8) Forklifts and Port Cargo Handling Equipment (Greater than 8,000 pounds lift capacity)</u></b>	
<u>Repowers with all-electric engine, including cost of installation of engine</u>	<u>Up to 75% covered</u>
<u>Replacement with new all-electric forklift or port cargo handling equipment</u>	<u>Up to 75% covered</u>
<b><u>9a) Light Duty Zero Emission Vehicle Supply Equipment (Level 1, Level 2 Fast Charging)</u></b>	
<u>Purchase, install and maintain light duty electric vehicle supply equipment that will be available to the public at Government Owned Property</u>	<u>Up to 80% covered</u>
<u>Purchase, install and maintain light duty electric vehicle supply equipment that will be available to the public at Non-Government Owned Property</u>	<u>Up to 80% covered</u>
<u>Purchase, install and maintain light duty electric vehicle supply equipment that will be available at workplace but not general public</u>	<u>Up to 60% covered</u>
<u>Purchase, install and maintain light duty electric vehicle supply equipment that will be available at multi-unit dwelling but not general public</u>	<u>Up to 60% covered</u>
<b><u>9b) Light Duty Hydrogen Fuel Cell Vehicle Supply Equipment (Minimum pressure of 70 megapascals that is located in a public place)</u></b>	
<u>Purchase, install and maintain light duty hydrogen fuel cell vehicle supply equipment, dispensing at least 250 kg/day that will be available to the public</u>	<u>Up to 33% covered</u>
<u>Purchase, install and maintain light duty hydrogen fuel cell vehicle supply equipment, dispensing at least 100 kg/day that will be available to the public</u>	<u>Up to 25% covered</u>
<b><u>10) Diesel Emission Reduction Act (DERA) Option</u></b>	
<u>For diesel emission reduction projects "not specifically enumerated in this Appendix D-2, but otherwise eligible under DERA pursuant to all DERA guidance documents available through the EPA."</u>	<u>Up to covered amounts eligible under most recent DERA guidance documents from EPA</u>

The table above details the maximum amount of funding that is available for various projects types. The remaining balance of those project costs must be covered by the project partner and is generally referred to as the “match requirement.” It should be noted that although minimum match requirements are enforced, a project partner can provide a larger than required match, typically called an “over-match” to potentially score better in the program’s evaluation process.

## Indiana’s Strategy to Deal with Areas of Disproportionate Air Quality Burden

Attachment A of the Volkswagen Consent Decree requires Beneficiaries to detail how they will “consider the beneficial impact of the selected EMAs on air quality in areas that bear a disproportionate share of the air pollution burden within its jurisdiction.” IDEM intends to provide guidance on this in the solicitation for projects packet specifically. This requirement may be met within the evaluation and scoring criteria for projects through one or any combination of the following:

- To assist and guide the final determination of grant recipients, preferences may be awarded to applicants in areas with sensitive populations, which may include but are not limited to:
  - Air quality attainment/nonattainment designations Areas designated as nonattainment or maintenance for one or more National Ambient Air Quality Standards
  - Historic areas of air quality concern
  - Areas with high population and traffic density
  - Areas with localized diesel emission-producing activities such as multimodal centers, distributions centers, ports, rail and bus terminals, airports, as well as others deemed to have a localized impact on air quality
  - Areas where human health data indicate higher than average respiratory ailments
  - Environmental Justice (EJ) areas as detailed in the U.S. EPA’s EJ Screening and Mapping Tool or other appropriate methodology

## Indiana’s Estimates of Emission Reduction Potential

Developing a representative example of the potential emission reduction impact of the Indiana Volkswagen Mitigation Trust Program can be handled in several ways. There are several methods and models that can be used to accomplish this task. The key in this process is to use a model that provides meaningful data in a consistent manner. ~~With this in mind,~~ IDEM determined that the best model for calculating emission reductions for this ~~program~~ BMP is the U.S. EPA’s Diesel Emissions Quantifier (DEQ) model. Although no model is perfect, the DEQ produces annual and lifetime emission reductions for a project as well as a cost per ton reduced component.

Using a reasonable representative sample of the types of projects in each group, IDEM estimates the following emission reductions from the Onroad, Nonroad, and DERA groups:

Onroad Equipment and Vehicles: 34.73 tons per year  
(Includes sample set of Class 4-8 truck, transit bus, and school bus projects)

Nonroad Equipment and Vehicles: 66.83 tons per year  
(Includes sample set of marine, port, and airport, projects)

DERA Option 10.60 tons per year  
(Includes sample set of switcher locomotive projects)

As noted above, the DEQ also produces a cost per ton reduced figure for various projects. For the Onroad, Nonroad, and DERA Groups, these figures are as follows:

Onroad Equipment and Vehicles Average:	\$342,099 per ton reduced
Nonroad Equipment and Vehicles Average:	\$56,929 per ton reduced
DERA Option Average:	\$30,852 per ton reduced

It should be noted that models to calculate emission reduction potential from light-duty electric vehicle infrastructure projects are not currently common in the marketplace. The Federal Highway Administration's Congestion Mitigation and Air Quality program estimates that the cost per ton of NOx emissions reduced through infrastructure development is approximately \$1.5 million per ton. As electric infrastructure programs and projects become more prevalent, more methods to calculate the associated NOx emission reductions will be available.

The total NOx emissions reduced from the Indiana Volkswagen Mitigation Trust Program is estimated at 127.65 tons per year. This does not include additional NOx emission reductions from electric infrastructure projects as those reductions are difficult to quantify. Further, there will be additional emission reductions in PM<sub>2.5</sub>, HC, CO, and CO<sub>2</sub>.

## **Indiana's Beneficiary Mitigation Plan Public Review and Input Process**

IDEM provided stakeholders multiple opportunities to provide insight and comment on the development of the Beneficiary Mitigation Plan to support the Indiana Volkswagen Mitigation Trust Program. In October of 2017, IDEM published a website with specific information on the national mitigation trust as well as the Indiana program. The website included an opportunity to sign up for automated updates to make sure interested parties were always kept apprised of any changes made to the program website.

IDEM also posted a draft framework document for the development of the Beneficiary Mitigation Plan. This document was used as the basis for a request for information from Indiana stakeholders on key elements of the Indiana Volkswagen Mitigation Trust Program. This draft framework document was made available and comments were received through March of 2018.

During this 6 months, through a series of public listening sessions conducted in various parts of the State of Indiana, and which included members of the Advisory Committee, through a formal email address portal, presentations to trade groups, and other interactions specific to the Indiana Volkswagen Mitigation Trust Program, IDEM requested input on several key questions related to the development of the Beneficiary Mitigation Plan. Through all of these input opportunities, IDEM received well over 100 unique comments and questions relevant to the Indiana program. IDEM's key questions to stakeholders revolved primarily around:

1. What types of projects should Indiana fund?
2. How much of Indiana's allotment should go towards electric vehicle infrastructure?
3. What is a reasonable match requirement for public and private sector partners and how to address higher-cost project types?
4. How much of Indiana's allotment, if any, should go towards the DERA option to expand project types beyond just those included in the national mitigation trust?

Although not required by the national mitigation trust, IDEM placed this revised version of the Beneficiary Mitigation Plan out for a second round of public review and comment in August 2018 with a focus on a transparent process. As before, these additional comments will be fully considered and incorporated into the final version of the Beneficiary Mitigation Plan to be submitted to the Trustee at a later date.

## **Potential Project Partners**

Potential project partners include non-profit organizations, health organizations, industry stakeholders (railroad, boats, trucking, and construction), educational institutions, environmental advocacy groups, environmental justice organizations, and communities. Through the Indiana Clean Diesel Coalition and other partnerships, IDEM has established and will continue to seek effective working relationships with many partners who are invited to provide input relative to Mitigation Trust projects.

## **Conclusion**

This Beneficiary Mitigation Plan has been developed in accordance with the terms of the Environmental Mitigation Trust Agreement for State Beneficiaries. 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 be available on the Indiana Volkswagen Mitigation Trust Program website after the Final Beneficiary Mitigation Plan has been submitted to the Trustee.

It should be noted that IDEM may, at its discretion, revise the Final Beneficiary Mitigation Plan as deemed necessary and appropriate in future years in a manner consistent with the objectives and limitations of the Volkswagen Environmental Mitigation Trust.