Volkswagen Diesel Settlement: Tennessee’s Approach to Implementing the Environmental Mitigation Trust

Tennessee Department of Environment and Conservation
Office of Energy Programs
Overview of the Volkswagen Settlement

• In 2015, Volkswagen (VW) publicly admitted that it had secretly and deliberately installed a defeat device -- software designed to cheat emissions tests and deceive federal and state regulators -- in approximately 590,000 model year 2009 to 2016 motor vehicles containing 2.0 and 3.0 liter diesel engines.

• The U.S. Department of Justice (DOJ) filed a complaint against VW, alleging that the company had violated the Clean Air Act.

• In October 2016 and May 2017, the U.S. District Court, Northern District of California approved two partial settlements related to the affected 2.0 and 3.0 liter vehicles, totaling $14.9 billion (“the VW Settlement”).

• Settlement funds from the first and second partial settlements (2.0 and 3.0 liter, respectively) will be dispersed amongst three categories:
Settlement Breakdown

- Vehicle Buyback and Modification (Consumers)
- Zero Emission Vehicle Investment (National and CA)
- Environmental Mitigation Trust (States, Tribes, Territories)
In public information sessions previously held by TDEC, additional details were provided on the VW Settlement’s Vehicle Buyback and Modification Program and the Zero Emission Vehicle Investment. This presentation will not cover these aspects of the VW Settlement.

For additional information on these topics, please refer to TDEC OEP’s public information session webinar recording here: https://www.tn.gov/content/dam/tn/environment/energy/documents/vw-resources/2017-12-22%202014.12%20Volkswagen%20Settlement%20Public%20Information%20Webinar.mp4.
Environmental Mitigation Trust (EMT)

• $2.9 billion will fund environmental mitigation projects that reduce NOx emissions.

• The funds will be allocated among Beneficiaries (states, tribes, and certain territories) based on the number of impacted VW vehicles in their jurisdictions.

• **TN's initial allocation based on the 2.0 and 3.0 liter partial settlements is $45,759,914.40.**
In March 2017, the Court appointed Wilmington Trust, N.A. as Trustee of the EMT, and in October 2017, the Court approved two Trust Agreements for Beneficiaries: one for the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico (“State Trust Agreement”), and one for federally recognized Indian tribes in the U.S.

The State of Tennessee officially became a Beneficiary of the EMT on January 29, 2018, allowing the State to fund Eligible Mitigation Actions (EMAs), as defined in the State Trust Agreement, that comply with the State’s Beneficiary Mitigation Plan (BMP).
Appendix D-2 of the State Trust Agreement lists 10 specific EMA categories and various EMA administrative expenditures that are eligible for EMT funding. **Note:** All terms that are both bolded and italicized in the following slides are defined in Appendix D-2 of the State Trust Agreement.

Eligible projects under these EMA categories include:

- Replacing or **Repowering** older diesel engines with new diesel, **Alternate Fueled** (e.g., compressed natural gas (CNG), propane, diesel-electric hybrid), or **All-Electric** engines (including installation of associated charging infrastructure);
- Replacing older diesel vehicles, vessels, and equipment with new diesel, **Alternate Fueled**, or **All-Electric** vehicles, vessels, and equipment (including installation of associated charging infrastructure);
- Installing charging infrastructure for light duty **All-Electric** vehicles; and
Nine of the 10 EMA categories set forth in the State Trust Agreement have separate sub-categories for Non-Government Owned and Government Owned projects.

For Non-Government Owned, the percentage of the cost of an EMA that can be funded by the EMT is dictated by the sub-category of the EMA (i.e., replacement with a new diesel vehicle versus replacement with a new All-Electric vehicle).

For Government Owned, up to 100% of the cost of an EMA can be funded with EMT funds, regardless of the sub-category. All eligible engines, vehicles, vessels, and equipment must be Scrapped.
(1) Large Trucks: *Class 8 Local Freight Trucks and Port Drayage Trucks*;
(2) Buses: *Class 4-8 School Bus, Shuttle Bus, or Transit Bus*;
(3) *Freight Switchers*;
(4) Ferries and *Tugs*;
(5) Ocean Going Vessel Shorepower;
(6) Medium Trucks: *Class 4-7 Local Freight Trucks*;
(7) *Airport Ground Support Equipment*;
(8) *Forklifts* and *Port Cargo Handling Equipment*;
(9) Light Duty *Zero Emission Vehicle* Supply Equipment; and
(10) Diesel Emission Reduction Act (DERA) Option.
Pursuant to Paragraph 4.1 of the State Trust Agreement, each Beneficiary shall submit to the Trustee and make publicly available a BMP.

The BMP must be submitted by a Beneficiary to the Trustee no later than 30 days prior to submitting its first funding request.

The BMP must summarize how the Beneficiary plans to use its mitigation funds, addressing:

- The process by which the Beneficiary shall seek and consider public input on its BMP;
- The Beneficiary's overall goal for the use of the funds;
- The categories of EMAs the Beneficiary anticipates that it will use and the expected percentages of funds to be used for each type of action;
- The expected ranges of emissions benefits the Beneficiary estimates would be realized by implementation of the EMAs identified in the Plan; and
- How the Beneficiary will consider the beneficial impact of EMAs on air quality in areas that bear a disproportionate share of the air pollution burden within its jurisdiction.
TDEC formed a Technical Advisory Committee (TAC) to develop the BMP. The TAC was comprised of staff from APC, OEP, OPSP, and OGC.

On July 18, 2018, a proposed BMP was released to the public. Following the close of a 30 day public comment period on August 17, 2018, all comments and input received were reviewed and considered by TDEC personnel prior to the finalization of the BMP.

On September 21, 2018, TDEC released a final BMP for implementing the State’s initial allocation of $45,759,914.40 under the EMT.
The purpose of the EMT is to execute environmental mitigation projects that reduce emissions of NOx.

In accordance with the EMT goal, the State’s overall goal in administering its EMT allocation is to reduce NOx emissions by targeting the largest contributors of mobile NOx emissions in Tennessee: the on-road, diesel heavy duty sector and the on-road, non-diesel light duty sector:

Overall Goal for Use of the State’s Allocation

Source: 2014 NEI v2
In furtherance of this goal, TDEC has considered and will continue to consider the following guiding principles when making decisions regarding the State’s EMT allocation:

- The State will fulfill its obligations under the Clean Air Act and the Tennessee Air Quality Act by working to ensure attainment and maintenance with the National Ambient Air Quality Standards (NAAQS).
- The State will attempt to generate health benefits through improved air quality for all Tennesseans, ensuring that such benefits also inure to vulnerable populations (e.g., low income, minority, elderly, and youth) and geographic areas that experience disproportionate levels of air pollutants.
- The State will endeavor to support local government and business economies, including those in Distressed Counties, by offsetting the cost of new and cleaner vehicle and transportation technologies.
- The State will be good stewards of public resources by leveraging non-EMT funding sources.
- The State will select categories that maximize the diversity and potential quantity of eligible applicants.
- The State will solicit projects that are both commercially viable and are of interest to eligible applicants.
- The State will attempt to strengthen emergency preparedness and the resiliency of the transportation sector through diversity of fuel and project types by spurring public and private investment in zero emission and alternative fuel vehicles.
The State selected the following EMA categories and allocation amounts:

- **Class 8 Local Freight Trucks and Port Drayage Trucks**: 10%
- **Class 4-7 Local Freight Trucks**: 15%
- **Class 4-8 School Bus, Shuttle Bus, or Transit Bus**: 60%
- **Light Duty Zero Emission Vehicle Supply Equipment**: 15%

These categories allow the State to target the two sectors that make up approximately 75% of Tennessee’s mobile NOx emissions: the on-road, diesel heavy duty sector (33% of mobile NOx emissions and 62% of mobile diesel NOx emissions) and the on-road, non-diesel light duty sector (40% of mobile NOx emissions).
### Class 8 Local Freight Trucks and Port Drayage Trucks:

<table>
<thead>
<tr>
<th>Anticipated % of Funds</th>
<th>10% ($4,575,991.44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Funds</td>
<td></td>
</tr>
<tr>
<td>Initial Eligible Project Funds: $4,118,392.30</td>
<td></td>
</tr>
<tr>
<td>Initial Eligible Administrative Expenditures Reserve: $457,599.14</td>
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</tbody>
</table>

### Class 4-7 Local Freight Trucks:

<table>
<thead>
<tr>
<th>Anticipated % of Funds</th>
<th>15% ($6,863,987.16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Funds</td>
<td></td>
</tr>
<tr>
<td>Initial Eligible Project Funds: $6,177,588.45</td>
<td></td>
</tr>
<tr>
<td>Initial Eligible Administrative Expenditures Reserve: $686,398.71</td>
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</tbody>
</table>
## EMA Categories and Allocation Breakouts

### Class 4-8 School Bus, Shuttle Bus, and Transit Bus:

<table>
<thead>
<tr>
<th>Anticipated % of Funds</th>
<th>60% ($27,455,948.64)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Available Funds</strong></td>
<td></td>
</tr>
<tr>
<td>Initial Eligible Project Funds: $24,710,353.78 ($16,000,000 for Transit and Shuttle Buses and $8,710,353.78 for School Buses)</td>
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</tr>
<tr>
<td>Initial Eligible Administrative Expenditures Reserve: $2,745,594.86</td>
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</tbody>
</table>

### Light Duty Zero Emission Vehicle (ZEV) Supply Equipment:

<table>
<thead>
<tr>
<th>Anticipated % of Funds</th>
<th>15% ($6,863,987.16)</th>
</tr>
</thead>
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<tr>
<td><strong>Available Funds</strong></td>
<td></td>
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<tr>
<td>Initial Eligible Administrative Expenditures Reserve: $686,398.71</td>
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The State Trust Agreement requires Beneficiaries to include within the BMP 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.”

To address these requirements, the State has developed a “Disproportionate Burden Index” (DBI), which combines environmental, economic, and demographic datasets in a geospatial format to determine geographic units in Tennessee that have the highest air quality burden.

Given that disproportionate burden is relative to the location of a project, TDEC will utilize the DBI and its geospatial display during the proposal review phase to assist with project prioritization and selection, focusing on the location and/or service area of the proposed project.
## Disproportionate Burden Index (DBI) Datasets

<table>
<thead>
<tr>
<th>Description of Dataset</th>
<th>Year</th>
<th>Source</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Population Below Federal Poverty Level</td>
<td>2016</td>
<td>U.S. Census Bureau</td>
<td>Counties above statewide average of 19%</td>
</tr>
<tr>
<td>On-road NOx Emissions</td>
<td>2014</td>
<td>National Emissions Inventory</td>
<td>Counties with on-road NOx emissions above average of 1383 tons per year</td>
</tr>
<tr>
<td>Vulnerable Age Segments of Population (Below 14 and Above 65)</td>
<td>2016</td>
<td>U.S. Census Bureau</td>
<td>Counties with population above state average of 35.78%</td>
</tr>
<tr>
<td>Percentage of Population that is Minority</td>
<td>2016</td>
<td>U.S. Census Bureau</td>
<td>Counties with population above state average of 13.35%</td>
</tr>
</tbody>
</table>
Disproportionate Burden Index (DBI) by County (October 2018)
TDEC plans to release separate project solicitations for each of the EMA categories. TDEC anticipates that it will employ the following order:

1. **Class 4-8 School Buses** (released in Q4 2018; awards to be announced in Q2 2019);
2. **Class 4-8 Shuttle and Transit Buses** (anticipated Q2 2019);
3. **Class 4-7 Local Freight Trucks, Class 8 Local Freight and Port Drayage Trucks**; and
4. **Light Duty ZEV Supply Equipment**.

Additional project solicitations for these EMA categories will be released until eligible project funds are exhausted. TDEC will strive to obligate Initial Eligible Project Funds by the end of calendar year 2023.
Application Evaluation

Vehicle projects will be evaluated by TDEC, in part, on the following criteria:

- Expected NOx emission reductions from the proposed project;
- Cost-effectiveness of the project;
- Whether the vehicles will operate primarily in a former nonattainment area for Ozone and/or PM 2.5 NAAQS;
- Whether the vehicles will operate primarily in a Distressed county;
- Potential impact to vulnerable populations or populations affected by a disproportionate share of the air pollution burden, evaluated using the DBI and any additional information provided by the applicant;
- Whether the project proposes use of eligible *Alternate Fueled* or *All-Electric* vehicles;
- Community benefits to be achieved as a result of the project, including whether the project will strengthen emergency preparedness and resiliency of the transportation sector through diversity of fuel and project types; and
- Whether the project will result in the establishment of a new refueling station or an expanded refueling station such that the station will have expanded fueling capacity installed during the period of performance, including expanded fuel storage, increased compressor capacity, or increased fueling rate.
Distressed Counties in Tennessee (Fiscal Year 2019)

TN Nonattainment/Maintenance Status – All Criteria Pollutants

# EMT Activities by Other States

## Count of States by Mitigation Action and EIA Region

<table>
<thead>
<tr>
<th>Mitigation Action</th>
<th>EIA Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class &amp; Local Freight Trucks and Port Drayage Trucks (Large Trucks)</td>
<td>Central Atlantic</td>
</tr>
<tr>
<td>Class 4-8 School Bus, Shuttle Bus, or Transit Bus</td>
<td>Gulf Coast</td>
</tr>
<tr>
<td>Freight Switchers</td>
<td>Lower Atlantic</td>
</tr>
<tr>
<td>Ferries/Tugs</td>
<td>Midwest</td>
</tr>
<tr>
<td>Ocean Going Vessels (OGV) Shorepower</td>
<td>New England</td>
</tr>
<tr>
<td>Class 4-7 Local Freight Trucks (Medium Trucks)</td>
<td>Rocky Mountain</td>
</tr>
<tr>
<td>Airport Ground Support Equipment</td>
<td>West Coast</td>
</tr>
<tr>
<td>Forklifts and Port Cargo Handling Equipment</td>
<td></td>
</tr>
<tr>
<td>Light-Duty Zero Emission Vehicle Supply Equipment</td>
<td></td>
</tr>
<tr>
<td>Diesel Emission Reduction Act (DERA) Option</td>
<td></td>
</tr>
</tbody>
</table>

Snapshot of “Mitigation Plans Summary” page from the Atlas EV Hub VW State Mitigation Plans Dashboard.
EMT Activities by Other States Continued

- EMT EMA selections have varied by state, with some Beneficiaries choosing to potentially fund all EMA categories (e.g., Alabama, Mississippi, Washington) and others choosing to limit funding to specific EMAs or applicant types (e.g., Georgia funding only Class 4-8 Shuttle and Transit Buses).

- Several states have not yet finalized a BMP, including Kentucky and Florida.

- See the VW Settlement Clearinghouse (maintained by the National Associations for State Energy Officials and Clean Air Agencies) for more information: [https://vwclearinghouse.org/](https://vwclearinghouse.org/).
Examples of Definitions Lacking from the State Trust Agreement

• Though many terms are defined in the State Trust Agreement, several key terms are not.
• TDEC included definitions for these key terms in the State’s BMP. Examples:

“Local” shall refer to vehicles that operate in Tennessee counties for 70% or more of the time.

“Port” shall refer to facilities along navigable water for the loading and unloading of cargo from ships; places from which aircraft operate that have paved runways and passenger and cargo terminals which include baggage-movement and passenger-transit operations; or nodes in the larger goods movement supply chain, to include cruise terminals, bulk terminals, container terminals, and intermodal container transfer facilities.
With regard to the Light Duty ZEV Supply Equipment category, TDEC will issue an RFI in Q2 2019 to request additional information as to how the State should consider allocating the funds within this EMA category between the following EMA sub-categories:

(1) Light duty electric vehicle supply equipment that will be available to the public;

(2) Light duty electric vehicle supply equipment that is available at a workplace but not to the general public; and

(3) Light duty electric vehicle supply equipment that is available at a multi-unit dwelling but not to the general public.
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