

**Semi Annual Report to the Trustee
Commonwealth of Pennsylvania
January 2023
(Reporting Period – July 1, 2022 through December 31, 2022)**

Overview: The Commonwealth of Pennsylvania (Pennsylvania) was designated as a beneficiary of the Environmental Mitigation Trust Agreement for State Beneficiaries (Trust Agreement) on January 29, 2018. The Pennsylvania Department of Environmental Protection (PA DEP) was designated as the lead agency responsible for disbursing Pennsylvania’s allocation of the trust fund monies. Pennsylvania is one of the few beneficiaries that has vehicles and equipment eligible for repower or replacement under all Eligible Mitigation Actions (EMAs) 1 through 8. Pennsylvania also developed an Electric Vehicle Roadmap¹ identifying goals for the distribution of electric vehicle charging infrastructure, which led to the development of EMA 9. Pennsylvania participated in the State Clean Diesel Grant Program for many years prior to the establishment of the trust fund and plans to continue participating, using Volkswagen settlement funds as match funding for DERA projects in EMA 10.

PA DEP created a suite of funding programs under the Driving PA Forward Initiative, which includes eight programs to disburse the trust fund monies. All ten EMAs were originally included across these eight programs, which is consistent with PA DEP’s stated goal in its Beneficiary Mitigation Plan to offer funding for all EMAs. However, after five years of offering funding for EMA 5, the Oceangoing Vessel (OGV) Shorepower Grant Program, eligible entities did not apply for this funding opportunity. Therefore, Pennsylvania discontinued the OGV Shorepower Grant Program in the second half of calendar year 2022.

In addition to discontinuing the OGV grant, PA DEP developed an additional grant for on-road vehicles – the Medium- & Heavy-Duty Zero Emission Vehicle Fleet Pilot Grant, to fund the replacement of Class 4-8 local freight and port drayage trucks, with zero-emission trucks. Data for this new program will be included under the EMAs 1 and 6 sections of this report.

Status of each EMA: PA DEP intends to offer funding under each remaining original program over at least five years, although PA DEP may offer the programs for varying periods of time, depending upon interest and participation in each program. The new Medium- & Heavy-Duty Zero Emission Vehicle Fleet Pilot Grant is currently only planned for one round of funding – which closes on 3/1/23.

Progress: In the sections below, PA DEP provides the following information describing the progress of implementing each EMA, required under Section 5.3 of the Trust Agreement:

- A summary of all costs expended through the end of the current reporting period
- An actual or projected termination date of the EMA
- A description of the development, implementation, and any modification of each approved EMA

¹ <http://files.dep.state.pa.us/Energy/OfficeofPollutionPrevention/StateEnergyProgram/PAEVRoadmap.pdf>

Additionally, for each EMA, PA DEP identifies which funding program supports the EMA, funding program details (open and close of application period, funding offered, etc.), projects completed under each program (per EMA), funds committed and expended, and other details.

EMA 1: Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)

PA DEP funds projects eligible under this EMA through two programs, the details for which are provided below:

- Truck and Bus Fleet Grant Program (formerly Class 8 Truck and Transit Bus Grant Program)
- Medium- & Heavy-Duty Zero-Emission Vehicle Fleet Pilot Grant
- Onroad Rebate Program

Truck and Bus Fleet Grant Program / Class 8 Truck and Transit Bus Grant Program – Calendar Years (CY) 2018-2019; CY2020; CY2021

- *Development*
 - As revised for CY2020, this program funds the repower or replacement of eligible Class 4-8 local freight trucks, school buses, shuttle buses, transit buses, and drayage trucks (EMAs 1, 2, and 6). When it was originally developed, this program only funded the repower or replacement of Class 8 local freight trucks (EMA 1) and transit buses (EMA 2). This program is a reimbursement grant program, meaning that project work must be completed, and all expenses paid, before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: No application periods open during the reporting period.
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in the first quarter of 2023.
- *Implementation*
 - CY2018-2019 – Total awarded grants: \$5,758,089.75 to eight EMA 1 projects (see EMA 2 for other projects). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 18.0 to 20.0 percent for the non-government owned vehicle replacement projects,
 - 64.4 to 74.9 percent for a non-government owned vehicle replacement with electric project, and
 - 75.0 to 90.0 percent for government owned vehicle replacement projects.
 - CY2020 – Total awarded grants: \$1,706,788.00 to two EMA 1 projects (see EMA 2 for other projects). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 25.0 percent for a non-government-owned vehicle replacement project,
 - 69.8 percent for a government owned vehicle replacement project.
 - CY2021 – Total awarded grants: \$1,837,050.00 to two EMA 1 projects (see EMA 2 for additional two projects). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 21.0 percent for a non-government-owned vehicle replacement project,
 - 37.2 percent for a government owned vehicle replacement project.
 - Anticipated cumulative grant award outcomes: (x132) diesel-to-diesel Class 8 truck replacements; (x7) diesel-to-electric Class 8 yard hostler trucks; (x2) diesel-to-diesel bulk

collection truck replacements; (x5) diesel-to-CNG refuse truck replacements; and (x5) diesel-to-diesel Class 8 service vehicle replacements, including one bulk fuel delivery truck with hybrid battery idle mitigation (x122 total replacements).

- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0004: \$432,320.00 requested and approved by the Trustee on 1/25/21.
 - FR0007: \$1,323,179.00 requested and approved by the Trustee on 2/15/22.
 - FR0008: \$2,903,564.25 requested and approved by the Trustee on 8/8/22.
 - Administrative expenditures to date: The following are the submitted, approved, and/or pending administrative expenditure reimbursements requested by PA DEP in Funding Requests (FRs) for this EMA.
 - FR0004: \$64,848.00 requested and approved by the Trustee on January 25, 2021.
 - FR0007: \$22,903.25 requested and approved by the Trustee on 2/15/22.
 - FR0010: \$4,175.84 in pending administrative expenses to be reimbursed as part of the next funding request to the Trustee.

Medium- & Heavy-Duty Zero-Emission Vehicle Fleet Pilot Grant – CYs 2022-2023

- *Development*
 - Designed to reduce diesel emissions from mobile sources in underserved, environmentally impaired areas such as Environmental Justice Areas, this new grant provides \$12.7 million from the VW settlement to fund the replacement of medium- and heavy-duty local freight and port drayage truck fleets with zero emission trucks. Additionally, data from successful projects will be used to produce a case study report for other fleet owners and operators in the Commonwealth of Pennsylvania to use as a framework reference for use in the planning of zero emission fleet transitions of their own.
- *Actual or Projected Termination Date*
 - Application periods: Single solicitation – Opened on 11/23/22 and closes on 3/1/23.
 - Next available funding: This is currently the only application solicitation planned for this funding opportunity.
- *Implementation*
 - CYs 2022-2023 – Awards expected to be announced by 6/30/23.
 - Anticipated cumulative rebate award outcomes: Unknown – To be determined after grant awards for the current application solicitation are approved.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No reimbursements yet. The first grant reimbursement requests aren't expected until 2025.
 - Administrative expenditures to date: No administrative expenses under this program for the current funding period. Early development expenses for this program were assigned to the general VW Mitigation Implementation fund, to be reimbursed with the next eligible funding request to the Trustee. See the section titled Additional Administrative expenses on page 17 for additional information.

Onroad Rebate Program –

CY2018-2019; CY2020; CY2021

- *Development*
 - As revised for CY2020, this program funds the repower or replacement of eligible Class 4-8 local freight trucks, school buses, shuttle, buses, transit buses, and drayage trucks (EMAs 1, 2, and 6). When it was originally developed, this program only funded repowers or replacements of Class 4-7 local freight trucks, school buses, shuttle buses, and port drayage trucks (EMAs 1, 2, and 6). PA DEP has also revised the program to accept multiple vehicles per application and issue single rebate vouchers for a fleet of eligible vehicles (up to 5), where previously the program only provided single vehicle rebates.
- *Actual or Projected Termination Date*
 - Application periods: No application periods open during the reporting period.
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in the first quarter of 2023.
- *Implementation*
 - CY2018-2019 – No rebates were issued to EMA 1 projects under this program.
 - CY2020 – PA DEP issued (x11) rebate vouchers for \$1,946,161.75 to replace (x28) EMA 1 eligible vehicles under this program. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 18.9 to 50.0 percent for the non-government owned vehicle replacement projects, and
 - 43.0 to 70.0 percent for government owned vehicle replacement projects.
 - CY2021 – PA DEP issued (x9) rebate vouchers totaling \$1,471,283.95 to replace (x18) EMA 1 eligible vehicles under this program. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 56.6% - 70.0% for government-owned vehicle replacement projects.
 - 23.6% - 48.3% for non-government projects.
 - Anticipated cumulative rebate award outcomes: (x41) diesel-to-diesel Class 8 truck replacements; (x4) diesel-to-CNG truck replacements; (x3) diesel to electric (w/ infrastructure) delivery truck replacements, and (x1) diesel-to-diesel drayage truck replacement. ((x49) total replacements).
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0007: \$1,024,097.50 requested and approved by the Trustee on 2/15/22.
 - FR0008: \$122,500 requested and approved by the Trustee on 8/8/22.
 - FR0009: \$194,722.93 requested and approved by the Trustee on 12/22/22.
 - Administrative expenditures to date: The following are the submitted, approved, and/or pending administrative expenditure reimbursements requested by PA DEP in Funding Requests (FRs) for this EMA:
 - FR0007: \$22,903.26 requested and approved by the Trustee on 2/15/22.
 - FR0010: \$9,929.17 in pending administrative expenses to be reimbursed as part of the next funding request to the Trustee.

EMA 2: Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)

PA DEP funds projects eligible under this EMA through two programs, the details for which are provided below:

- Truck and Bus Fleet Grant Program (formerly Class 8 Truck and Transit Bus Grant Program)
- Onroad Rebate Program

Truck and Bus Fleet Grant Program (formerly Class 8 Truck and Transit Bus Grant Program – CY2018-2019; CY2020; CY2021

- *Development*
 - As revised for CY2020, this program funds the repower or replacement of eligible Class 4-8 local freight trucks, school buses, shuttle, buses, transit buses, and drayage trucks (EMAs 1, 2, and 6). When it was originally developed, this program only funded the repower or replacement of Class 8 local freight trucks (EMA 1) and transit buses (EMA 2). This program is a reimbursement grant program, meaning that project work must be completed before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: No application periods open during the reporting period.
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in the first quarter of 2023.
- *Implementation*
 - CY2018-2019 – Total awarded grants: \$1,104,000 to one EMA 2 project (see EMA 1 for other projects). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 44.4 percent for a government owned vehicle replacement project.
 - CY2020 – Total awarded grants: \$1,381,540 to (x3) EMA 2 projects (see EMA 1 for other projects). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 25.0 to 30.0 percent for two government owned vehicle replacement projects.
 - CY2021 – Total awarded grants: \$1,135,798.00 to two EMA 2 projects (see EMA 1 for additional two projects). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 30.0 to 42.0 percent for two government owned vehicle replacement projects.
 - Anticipated cumulative grant award outcomes: (x2) diesel-to-electric transit bus replacements, (x6) diesel-to-electric school bus replacements, (x7) diesel-to-propane school bus replacements, and (x55) diesel-to-diesel school bus replacements (x57 total replacements).
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0004: \$1,104,000.00 requested and approved by the Trustee on January 25, 2021.
 - Administrative expenditures to date: The following are the submitted, approved, and/or pending administrative expenditure reimbursements requested by PA DEP in Funding Requests (FRs) for this EMA.
 - FR0004: \$13,723.18 requested and approved by the Trustee on January 25, 2021.
 - FR0010: \$8,351.69 in pending administrative expenses to be reimbursed as part of the next funding request to the Trustee.

Onroad Rebate Program –

CY2018-2019; CY2020; CY2021

- *Development*
 - As revised for CY2020, this program funds the repower or replacement of eligible Class 4-8 local freight trucks, school buses, shuttle, buses, transit buses, and drayage trucks (EMAs 1, 2, and 6). When it was originally developed, this program only funded repowers or replacements for Class 4-7 local freight trucks, school buses, shuttle buses, and port drayage trucks (EMAs 1, 2, and 6). PA DEP has also revised the program to accept multiple vehicles per application and issue single rebate vouchers for a fleet of eligible vehicles (up to 5), where previously the program only provided single vehicle rebates.
- *Actual or Projected Termination Date*
 - Application periods: No application periods open during this reporting period.
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in the first quarter of 2023.
- *Implementation*
 - CY2018-2019 – PA DEP issued (x260) rebate vouchers for \$10,499,333.00 to replace (x260) EMA 2 eligible vehicles under this program (See EMA 6 for additional rebates). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 19.9 percent for a non-government owned shuttle bus replacement, and
 - 34.4 to 54.1 percent for the replacements of school buses contracted with a public school.
 - CY2020 – PA DEP issued (x50) rebate vouchers for \$4,280,937.16 to replace (x144) EMA2 eligible vehicles under this program. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 23.9 to 39.5 percent for government owned vehicle and public-school district-affiliated school bus replacement projects.
 - CY2021 – PA DEP issued (x45) rebate vouchers for \$3,706,698.00 to replace (x106) EMA2 eligible vehicles under this program. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 25.23 to 45.18 percent for public school district-affiliated school bus replacement projects.
 - Anticipated cumulative rebate award outcomes: (x408) diesel-to-diesel school bus replacements; (x45) biodiesel-to-biodiesel (B5) school bus replacements, (x78) diesel-to-LPG (propane) school bus replacements, (x9) diesel-to-electric (including infrastructure) replacements, and (x1) diesel-to-diesel shuttle bus replacement. ((x544) total replacements).
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0001: \$364,455.00 requested and approved by Trustee on September 20, 2019.
 - FR0002: \$7,174,878.00 requested and approved by Trustee on February 25, 2020.
 - FR0003: \$2,960,000.00 requested and approved by Trustee on September 14, 2020.
 - FR0007: \$1,328,787.24 requested and approved by the Trustee on 2/15/22.
 - FR0008: \$1,206,107.40 requested on 6/7/22 and pending approval by the Trustee.
 - FR0009: \$917,871.90 requested and approved by the Trustee on 12/22/22.

- Administrative expenditures to date: The following are the submitted, approved, and/or pending administrative expenditure reimbursements requested by PA DEP in Funding Requests (FRs) for this EMA.
 - FR0001: \$52,401.90 requested and approved by Trustee on September 20, 2019.
 - FR0002: \$269,664.83 requested and approved by Trustee on February 25, 2020.
 - FR0003: \$10,149.97 requested and approved by Trustee on September 14, 2020.
 - FR0007: \$45,095.12 requested and approved by the Trustee on 2/15/22.
 - FR0010: \$ 46,336.12 in pending administrative expenses to be reimbursed as part of the next funding request to the Trustee.

EMA 3: Freight Switchers

PA DEP funds projects eligible under this EMA through the Marine and Rail Freight Movers Grant Program. Details for the program are provided below.

Marine and Rail Freight Movers Grant Program – CY2020-2021: Rounds 1 & 2

- *Development*
 - PA DEP developed this program to fund the repower or replacement of eligible freight switchers (EMA 3) and the repower or upgrade of eligible marine engines (EMA 4). This program is a reimbursement grant program, meaning that project work must be completed before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: No applications periods open during this reporting period.
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in late spring/early summer 2023.
- *Implementation*
 - PA DEP offered up to 60 percent reimbursement for government-owned repowers or replacements (up to 80 percent for electric), and up to 40 percent reimbursement for non-government owned repowers or replacements (up to 75 percent for electric).
 - CY2020-2021: Round 1 – Total awarded grants: PA DEP awarded \$1,260,000 to one (1) EMA 3 project during this reporting period. Funding percentages: PA DEP committed to reimburse the following percentage of eligible project costs:
 - 60 percent for a government-owned, non-road equipment replacement project.
 - CY2020-2021: Round 2 - Total awarded grants: PA DEP awarded \$8,689,104.00 to (x3) EMA 3 projects during this reporting period. Funding percentages: PA DEP committed to reimburse the following percentage of eligible project costs:
 - 60.0 percent for a government-owned, locomotive replacement project.
 - 24.1 to 75 percent for two, non-government all-electric locomotive replacement projects.
 - Anticipated grant award outcomes: Replacement of (x2) switcher locomotives with diesel-electric switcher locomotives and replacement of (x3) switcher locomotives with all-electric versions.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No disbursement requests have been submitted to the Trustee and no funds have been disbursed from the Trust Fund for these projects because

none have been completed (3-year project periods). PA DEP expects to request full disbursements for these projects beginning in 2023.

- Administrative expenditures to date: PA DEP has approximately \$19,032.62 in pending administrative costs associated with the Marine & Rail Freight Movers Grant Program, that will be submitted with the next eligible funding request that includes EMA 3 projects. PA DEP has not previously submitted any reimbursement requests for administrative costs for this EMA.

EMA 4: Ferries/Tugs

PA DEP funds projects eligible under this EMA through the Marine and Rail Freight Movers Grant Program. Details for the program are provided below.

Marine and Rail Freight Movers Grant Program – CY2020-2021: Rounds 1 & 2

- *Development*
 - PA DEP developed this program to fund the repower or replacement of eligible freight switchers (EMA 3) and the repower or upgrade of eligible marine engines (EMA 4). This program is a reimbursement grant program, meaning that project work must be completed before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: No application periods open during this reporting period.
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in late spring/early summer 2023.
- *Implementation*
 - CY2020-2021 – Total awarded grants: No grants were awarded during this reporting period under this program for this EMA. Funding percentages: PA DEP offered up to 60 percent reimbursement for government-owned repowers or replacements (up to 80 percent for electric), and up to 40 percent reimbursement for non-government owned repowers or replacements (up to 75 percent for electric).
 - Anticipated grant award outcomes: Unknown at this time, due to no awards being issued.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No disbursement requests have been submitted to the Trustee and no funds have been disbursed from the Trust Fund for these projects because none have been completed (3-year project periods). PA DEP expects to request full disbursements for these projects beginning in 2023.
 - Administrative expenditures to date: PA DEP has no pending administrative costs linked to this EMA under this program. PA DEP has not previously submitted any reimbursement requests for administrative costs for this EMA under this program.

EMA 5: Ocean Going Vessels (OGV) Shorepower

PA DEP previously offered funding for projects eligible under this EMA through the Ocean-Going Vessel Shorepower Grant Program. However, due to a lack of interest in this program, DEP closed this, and re-allocated the funding to another the new Medium- and Heavy-Duty Zero-Emission Vehicle Fleet Pilot Grant. Up-to-date details for the program are provided below.

Ocean-Going Vessel Shorepower Grant Program – CY2019-2020; CYs 2021-2022

- *Development*
 - PA DEP developed this program to fund the installation of eligible marine shorepower systems at eligible port locations in Pennsylvania. This program is a reimbursement grant program, meaning that project work must be completed before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application period: No application periods were open during this reporting period.
 - Next available funding: Due to lack of interest in shorepower, DEP closed this program, and re-allocated the remaining funds to an on-road funding program (EMAs 1 & 6).
- *Implementation*
 - Total awarded grants: No grants were awarded during this reporting period; no applications were received. Funding percentages: PA DEP offered up to 75 percent reimbursement for government applicants and up to 25 percent reimbursement for non-government applicants.
 - Anticipated grant award outcomes: Unknown at this time, due to no awards being issued.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No disbursement requests have been submitted to the Trustee and no funds have been disbursed from the Trust Fund for this EMA because no projects have been approved for funding.
 - Administrative expenditures to date: PA DEP has approximately \$4,048.07 in pending administrative costs linked to this EMA, that will be submitted with the next eligible funding request to the Trustee. PA DEP has not previously submitted any reimbursement requests for administrative costs for this EMA.

EMA 6: Class 4-7 Local Freight Trucks (Medium Trucks)

PA DEP funds projects eligible under this EMA through two programs, the details for which are provided below:

- Truck and Bus Fleet Grant Program (beginning CY2020) (formerly Class 8 Truck and Transit Bus Grant Program)
- Medium- & Heavy-Duty Zero-Emission Vehicle Fleet Pilot Grant
- Onroad Rebate Program

Truck and Bus Fleet Grant Program - CY2020; CY2021

- *Development*
 - As revised for CY2020, this program funds the repower or replacement of eligible Class 4-8 local freight trucks, school buses, shuttle, buses, transit buses, and drayage trucks (EMAs 1, 2, and 6). When it was originally developed, this program only funded the repower or replacement of Class 8 local freight trucks (EMA 1) and transit buses (EMA 2). This program is a reimbursement grant program, meaning that project work must be completed before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: No application periods open during this reporting period
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in the first quarter of 2023.

- *Implementation*
 - CY 2020; CY 2021 – Total awarded grants: No grants were awarded under this EMA during this reporting period. Funding percentages: PA DEP offered up to 70 percent reimbursement for government-owned repowers or replacements (up to 100 percent for electric), and up to 50 percent reimbursement for non-government owned repowers or replacements (up to 100 percent for electric).
 - Anticipated cumulative grant award outcomes: Unknown at this time, due to no awards being issued under this EMA.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No disbursement requests have been submitted to the Trustee and no funds have been disbursed from the Trust Fund for this EMA because no projects have been approved for funding.
 - Administrative expenditures to date: PA DEP has approximately \$1,391.95 in pending administrative costs linked to this EMA, that will be submitted with the next eligible funding request to the Trustee. PA DEP has not previously submitted any reimbursement requests for administrative costs for this EMA under this program.

Medium- & Heavy-Duty Zero-Emission Vehicle Fleet Pilot Grant –
CYs 2022-2023

- *Development*
 - Designed to reduce diesel emissions from mobile sources in underserved, environmentally impaired areas such as Environmental Justice Areas, this new grant provides \$12.7 million from the VW settlement to fund the replacement of medium- and heavy-duty local freight and port drayage truck fleets with zero emission trucks. Additionally, data from successful projects will be used to produce a case study report for other fleet owners and operators in the Commonwealth of Pennsylvania to use as a framework reference for use in the planning of zero emission fleet transitions of their own.
- *Actual or Projected Termination Date*
 - Application periods: Single solicitation – Opened on 11/23/22 and closes on 3/1/23.
 - Next available funding: This is currently the only application solicitation planned for this funding opportunity.
- *Implementation*
 - CYs 2022-2023 – Awards expected to be announced by 6/30/23.
 - Anticipated cumulative rebate award outcomes: Unknown – To be determined after grant awards for the current application solicitation are approved.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No reimbursements yet. The first grant reimbursement requests aren't expected until 2025
 - Administrative expenditures to date: No administrative expenses under this program for the current funding period. Early development expenses for this program were assigned to the general VW Mitigation Implementation fund, to be reimbursed with the next eligible funding request to the Trustee. See the section titled Additional Administrative expenses on page 17 for additional information.

Onroad Rebate Program – CY2018-2019; CY2020; CY2021

- *Development*
 - As revised for CY2020, this program funds the repower or replacement of eligible Class 4-8 local freight trucks, school buses, shuttle, buses, transit buses, and drayage trucks (EMAs 1, 2, and 6). When it was originally developed, this program only funded repowers or replacements for Class 4-7 local freight trucks, school buses, shuttle buses, and port drayage trucks (EMAs 1, 2, and 6). PA DEP has also revised the program to accept multiple vehicles per application and issue single rebate vouchers for a fleet of eligible vehicles (up to 5), where previously the program only provided single vehicle rebates.
- *Actual or Projected Termination Date*
 - Application periods: No application periods open during this reporting period.
 - Next available funding: PA DEP plans to reopen this program and offer additional funding in the first quarter of 2023.
- *Implementation*
 - CY2018-2019 – PA DEP issued (x9) rebate vouchers for \$225,000.00 to replace (x9) EMA 6 eligible vehicles under this program. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 13.5 to 20.8 percent for the non-government owned vehicle replacement projects.
 - CY2020 – PA DEP issued (x5) rebate vouchers (x3 are Class 4-7 trucks, x2 are mixed class trucks) for \$380,594.75 to replace (x9) EMA 6 eligible vehicles under this program. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 19.9 to 60.2 percent for non-government owned vehicle replacement projects
 - 70.0 percent for government-owned vehicle replacement projects.
 - CY2021 – PA DEP issued (x5) rebate vouchers totaling \$562,518.00 under this EMA, during the reporting period. Funding Percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 25.0 percent for non-government owned vehicle replacement projects, and
 - 64.9 to 70.0 percent for government-owned vehicle replacement projects.
 - Anticipated cumulative rebate award outcomes: (x24) diesel-to-diesel Class 4-7 truck replacements and (x6) diesel-to-propane Class 4-7 truck replacement. ((x30) total replacements).
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0002: \$225,000.00 requested and approved by Trustee on February 25, 2020.
 - FR0008: \$28,344.00 requested and approved by the Trustee on 8/8/22.
 - Administrative expenditures to date: PA DEP has approximately \$12,510.55 in pending administrative costs associated with the Onroad Rebate Program that will be submitted with the next eligible funding request that includes EMA 6 projects. PA DEP has not previously submitted any reimbursement requests for administrative costs for this EMA.

EMA 7: Airport Ground Support Equipment

PA DEP funds projects eligible under this EMA through the Electric Cargo Handling Grant Program. Details for the program are provided below.

Electric Cargo Handling Grant Program – CYs 2019-2020: Rounds 1 & 2; CYs 2021-2022

- *Development*
 - PA DEP developed this program to fund the repower or replacement of diesel-powered forklifts (EMA 8), airport ground support equipment (GSE) (EMA 7), and port cargo handling equipment (EMA 8) with all-electric equipment. This program is a reimbursement grant program, meaning that project work must be completed before the grantee applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: The CY2021-2022 application solicitation period closed on 9/23/22.
 - Next available funding: No additional rounds planned as funding is depleted.
- *Implementation*
 - CYs 2019-2020; Round 1 – Total awarded grants: No grants were awarded under this EMA during this reporting period. PA DEP committed to reimburse up to 60 percent for government-owned, all-electric GSE replacement projects, and up to 40 percent for non-government-owned, all-electric GSE replacement projects.
 - CYs 2019-2020; Round 2 – Total awarded grants: No grants were awarded under this EMA during this reporting period. PA DEP committed to reimburse up to 60 percent for government-owned, all-electric GSE replacement projects, and up to 40 percent for non-government-owned, all-electric GSE replacement projects.
 - CYs 2021-2022 – five applications received requesting a total of \$7.4 million; applications were reviewed and scored and are currently proceeding through the internal DEP approval process. Awards expected to be announced during the next reporting period.
 - Anticipated grant award outcomes: Unknown at this time, due to no awards being issued.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No funds have been disbursed from the Trust Fund for projects under EMA 7, because none have been awarded.
 - Administrative expenditures to date: PA DEP has approximately \$13,320.75 in pending administrative costs linked to this EMA, that will be submitted with the next eligible funding request with EMA 7 projects. PA DEP has not previously submitted any reimbursement requests for administrative costs for this EMA.

EMA 8: Forklifts and Port Cargo Handling Equipment

PA DEP funds projects eligible under this EMA through the Electric Cargo Handling Grant Program. Details for the program are provided below.

Electric Cargo Handling Grant Program – CYs 2019-2020: Rounds 1 & 2; CYs 2021-2022

- *Development*

PA DEP developed this program to fund the repower or replacement of diesel-powered forklifts (EMA 8), airport ground support equipment (GSE) (EMA 7), and port cargo handling equipment (EMA 8) with all-electric equipment. This program is a reimbursement grant program, meaning that project work must be completed before the grantee applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: The CY2021-2022 application solicitation period closed on 9/23/22.

- Next available funding: No additional rounds planned as funding is depleted.
- *Implementation*
 - CYs 2019-2020; Round 1– Total awarded grants: \$435,960.00 awarded to one project for the all-electric replacement of (x2) pieces of eligible port cargo-handling equipment. Funding Percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 60% for a government owned vehicle replacement project.
 - CYs 2019-2020; Round 2– Total awarded grants: No grants awarded for this EMA during this reporting period. Funding percentages: PA DEP committed to fund awards under this EMA at the rate of 60% for government-owned vehicle replacement projects and 40% for non-government-owned vehicle replacement projects.
 - CYs 2021-2022 – Total awarded grants: No grant awards yet. The grant award recommendation package for this solicitation is proceeding through the internal DEP approval process. Awards expected to be announced during the next reporting period.
 - Anticipated grant award outcomes: (x2) diesel-to-electric terminal tractor replacements.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: No disbursement requests have been submitted to the Trustee and no funds have been disbursed from the Trust Fund for this project because it has yet to be completed (3-year project periods). PA DEP expects to request full disbursements for these projects beginning anytime in 2023.
 - Administrative expenditures to date: PA DEP has approximately \$13,240.74 in pending administrative costs linked to this EMA, that will be submitted with the next eligible funding request including EMA 8 projects. PA DEP has not previously submitted any reimbursement requests for administrative costs for this EMA.

EMA 9: Light-Duty Zero Emission Vehicle Supply Equipment

PA DEP funds projects eligible under this EMA through two programs, the details for which are provided below:

- DC Fast Charging and Hydrogen Fueling Grant Program
- Level 2 Electric Vehicle (EV) Charging Rebate Program

DC Fast Charging and Hydrogen Fueling Grant Program – CY2018-2019; CY2020; CY2021

- *Development*
 - PA DEP developed this program to fund the purchase and installation of DC fast (Level 3) electric vehicle chargers or hydrogen refueling infrastructure. This program is a reimbursement grant program, meaning that project work must be completed before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: CY2021 opened for applications on 10/29/21 and closed on 1/31/22. DEP received 60 applications.
 - Next available funding: All funding for this program has been exhausted. No further application periods anticipated.
- *Implementation*

- CY2018-2019 – Total awarded grants: PA DEP awarded \$2,679,112.77.00 to 11 EMA 9 projects under this grant program. Funding percentages: PA DEP committed to reimburse up the following percentages of eligible project costs:
 - 69.3 to 75.0 percent of eligible costs for the purchase and installation of DC fast electric vehicle charging infrastructure.
- CY2020 – Total awarded grants: PA DEP awarded \$1,715,066 to eight EMA 9 projects under this grant program. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 26.8 to 74.9 percent of eligible costs for the purchase and installation of DC fast electric vehicle charging infrastructure.
- CY2021 – Total awarded grants: PA DEP awarded \$3,393,867.00 to sixteen EMA 9 projects under this program. Funding percentages: PA DEPA committed to reimburse the following percentages:
 - 16.2 to 65.0 percent of eligible costs for the purchase and installation of DC fast electric vehicle charging infrastructure.
- Anticipated cumulative grant award outcomes: Installation of (x135) DC fast charging plugs. Additionally, (x10) Level 2 EV charging plugs will be installed in conjunction with these projects but are not funded by this program.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0007: \$8,857.50 requested and approved by the Trustee on 2/15/22.
 - FR0008: \$394,995.00 requested and approved by the Trustee on 8/8/22.
 - FR0009: \$362,750.38 requested and approved by the Trustee on 12/22/22.
 - Administrative expenditures to date: The following are the submitted, approved, and/or pending administrative expenditure reimbursements requested by PA DEP in Funding Requests (FRs) for this EMA.
 - FR0007: \$1,328.55 requested and approved by the Trustee on 2/15/22.
 - FR0010: \$26,522.19 in pending administrative expenses to be reimbursed as part of the next funding request to the Trustee.

Level 2 Electric Vehicle (EV) Charging Rebate Program – Version 1 (CYs2018-2019); Version 2 (CY2020); Version 3 (CYs 2021-2022); Version 4 (CYs 2022-2023)

- *Development*
 - PA DEP developed this program to provide rebates for the installation of Level 2 EV chargers in specific location types. This program is issued in ‘Versions’ rather than by calendar year.
- *Actual or Projected Termination Date*
 - Application periods: Version 3 of this Program opened for applications on May 6, 2021 and closed on 6/30/22, after funding the installation of an additional 750 Level 2 charging plugs.
 - Next available funding: Version 4 of this Program opened for applications on 7/29/22 and will be open continuously until all remaining funds have been awarded. Funds are expected to be completely exhausted by June 2023.
- *Implementation*

Version 1 – Total awards: PA DEP issued (x221) rebate vouchers (excludes vouchers that were withdrawn, denied, or expired) from October 2018 through December 1, 2019 for \$3,183,998.00 for installation of Level 2 EV chargers. DEP approved (x221) voucher redemptions totaling \$3,094,125.00, for EMA 9 projects. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:

- 15.8 to 100 percent of eligible project costs, depending on the public accessibility of the project and whether the site is networked.
- Version 2 – Total awards: PA DEP issued (x201) rebate vouchers (excludes vouchers that were withdrawn, denied, or expired) December 2, 2019 through June 30, 2021 for a total of \$1,975,599.00, for installation of Level 2 EV chargers. DEP approved (x190) of the issued vouchers for reimbursements totaling \$1,863,208.00 for EMA 9 (Level 2) projects. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 15.0 to 90.0 percent of eligible project costs, depending on the public accessibility of the project and whether the site is networked.
- Version 3 – Total awards: Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 8.0 to 76.0 percent of eligible project costs, depending on the public accessibility of the project and whether the site is networked.
- Version 3 – PA DEP issued (x210) rebate vouchers for Version 3, totaling \$2,893,872, for the installation of Level 2 chargers. DEP approved (x104) of the issued vouchers for reimbursements totaling \$1,545,541.00 for EMA 9 (Level 2) projects.
- Anticipated cumulative rebate award outcomes: Installation of (x1,750) new Level 2 EV charging plugs across Pennsylvania are complete. In total, installation of (x2,050) Level 2 EV charging plugs is anticipated from currently active vouchers, including those already approved for reimbursement.
- *Summary of Costs Expended During Reporting Period*
 - Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0001: \$226,913.00 requested and approved by Trustee on September 20, 2019.
 - FR0002: \$872,899.00 requested and approved by Trustee on February 25, 2020.
 - FR0003: \$1,147,755.60 requested and approved by Trustee on September 14, 2020.
 - FR0004: \$970,860.00 requested and approved by the Trustee on January 25, 2021.
 - FR0005: \$426,957.00 requested and approved by the Trustee on September 10, 2021.
 - FR0006: \$808,624.46 requested and approved by the Trustee on September 10, 2021.
 - FR0007: \$829,796.00 requested and approved by the Trustee on 2/15/22.
 - FR0008: \$478,916.00 requested and approved by the Trustee on 8/8/22.
 - FR0009: \$514,467.00 requested and approved by the Trustee on 12/22/22.
 - Administrative expenditures to date: The following are the submitted, approved, and/or pending administrative expenditure reimbursements requested by PA DEP in Funding Requests (FRs) for this EMA.
 - FR0001: \$34,036.95 requested and approved by Trustee on September 20, 2019.
 - FR0002: \$63,023.45 requested and approved by Trustee on February 25, 2020.
 - FR0003: \$39,748.34 requested and approved by Trustee on September 14, 2020.
 - FR0004: \$49,051.98 requested and approved by the Trustee on January 25, 2021.
 - FR0007: \$76,636.04 requested and approved by the Trustee on 2/15/22.

- FR0010: \$35,325.21 in pending administrative expenses to be reimbursed as part of the next funding request to the Trustee

EMA 10: Diesel Emission Reduction Act (DERA) Option

Under this EMA, PA DEP is authorized to use Trust Fund monies as its voluntary match funds under the EPA’s State Clean Diesel Grant Program. PA DEP participated in the EPA’s State Clean Diesel Grant Program prior to the establishment of the Trust Fund and has continued to do so with the addition of the match funds from the Trust Fund.

Pennsylvania State Clean Diesel Grant Program – Fiscal Years (FY) 2017-2018; FYs 2019-2020; FYs 2021-2022

- *Development*
 - PA DEP modified its existing program to fund a variety of diesel emission reduction projects authorized by the Diesel Emission Reduction Act². This program is a reimbursement grant program, meaning that project work must be completed before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
 - Application periods: No funding application periods open during this reporting period.
 - Next available funding: PA DEP plans to open the FYs 2021-2022 application period in spring 2023.
- *Implementation*
 - FY2017-2018 - Total awarded grants: \$3,259,683 to (x9) EMA 10 projects (\$2,427,439.60 from Trust Funds, \$832,243.40 from EPA funds). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 14.0 to 25.0 percent of eligible project costs for vehicle and equipment replacement projects, and
 - up to 39.8 percent for a locomotive idle reduction project.
 - FY2019 - Total awarded grants: \$2,400,969.00 to nine EMA 10 projects (\$2,427,439.60 from Trust Funds, \$500,532.00 from EPA funds). One awardee did not accept their award in the amount of \$443,601. This brought the total amount of awarded funds for this round down to \$1,957,368.00. Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 18.0 to 25.0 percent of eligible project costs for vehicle and equipment replacement projects.
 - FY2020 – Total awarded grants: \$2,951,049.75 to EMA 10 projects (\$2,450,518.75 from Trust funds, \$500,531.00 from EPA funds). Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
 - 35.8 to 45.0 percent of eligible project costs for vehicle and equipment replacement projects.
 - Anticipated grant award outcomes: (x78) diesel school bus replacements; (x29) CNG refuse truck replacements; (x12) diesel refuse truck replacements; (x2) diesel trash compactor vehicle replacements; (x1) diesel bulldozer replacement; (x2) diesel street sweeper replacements; (x1) diesel crawler tractor replacement; (x2) diesel Class 8

² “Diesel Emissions Reduction” program in the Energy Policy Act of 2005 (EPA Act 2005, P.L. 109-58, Title VII, Subtitle G §§791-797; 42 U.S.C. §§16131-16137)

articulated truck replacements; (x1) all-electric bulldozer replacement; (x4) all-electric refuse truck replacements; (x4) all-electric aggregate materials handler replacements; (x1) diesel aggregate materials handler; (x1) all-electric transportation refrigeration unit replacement; and installation of idle reduction technology on (x6) locomotives. (x134 total replacements and x6 retrofits).

- PA DEP’s latest PA State Clean Diesel Grant Quarterly Reports, which are submitted to the EPA to document DERA projects, are included as attachments to this report.

• *Summary of Source Funding Allocations Through Reporting Period*

Available Funds	FY2017	FY2018	Combined
EPA Funds (base and bonus)	\$413,218.00	\$419,025.00	\$832,243.00
Trust Funds (voluntary match)	\$275,479.00	\$2,154,310.00	\$2,429,789.00
Total Available	\$688,697.00	\$2,573,335.00	\$3,262,032.00

Available Funds	FY2019	FY2020	Combined
EPA Funds (base and bonus)	\$500,532.00	\$553,494.00	\$1,054,026.00
Trust Funds (voluntary match)	\$2,154,309.00	\$2,154,310.00	\$4,308,619.00
Total Available	\$2,654,841.00	\$2,707,804.00	\$5,362,645.00
Available Funds	FY2021	FY2022	Combined
EPA Funds (base and bonus)	\$546,174.00	\$577,989.00	\$1,124,163.00
Trust Funds (voluntary match)	\$2,154,309.00	\$381,432.00	\$2,535,741.00
Total Available	\$2,700,483.00	\$959,421.00	\$3,659,904.00

- Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
 - FR0001: \$116,401.40 requested and approved by Trustee on 9/20/19. These project payments were matched by \$174,602.10 in EPA funds.
 - FR0003: \$2,073,209.68 requested and approved by Trustee on 9/14/20. These project payments were matched by \$605,721.82 in EPA funds.
 - FR0004: \$146,728.84 requested and approved by the Trustee on 1/25/21. These project payments were matched by \$38,943.00 in EPA funds.
 - FR0008: \$293,449.95 requested and approved by the Trustee on 8/8/22. These project payments were matched by \$100,813.05 in EPA funds.
 - FR0009: \$158,816.69 requested and approved by the Trustee on 12/22/22. These project payments were matched by \$56,433.31 in EPA funds.
- Administrative expenditures to date: The following are the submitted, approved, and/or pending administrative expenditure reimbursements requested by PA DEP in Funding Requests (FRs) for this EMA.
 - FR0001: \$17,460.21 requested and approved by Trustee on September 20, 2019.
 - FR0003: \$16,831.21 requested and approved by Trustee on September 14, 2020.

- FR0004: \$22,009.33 requested and approved by the Trustee on January 25, 2021.
- FR0010: PA DEP has approximately \$41,145.36 in pending administrative expenses to be reimbursed as part of the next funding request to the Trustee

Additional Administrative Costs:

In addition to the administrative costs noted by EMA above, PA DEP also calculates general administrative costs for work applying to multiple EMAs, which will be included in various EMA submissions where appropriate, and where there is room under the 15 percent cap. The current administrative costs identified under each EMA above include all pending general administrative expenses incurred over the past three reporting periods and totals \$113,440.73.

I, as an authorized representative of the Pennsylvania Department of Environmental Protection and the Commonwealth of Pennsylvania, attest that the information submitted in this report is true and correct, under penalty of perjury.

Richard Negrin, Secretary
Pennsylvania Department of Environmental Protection

Date

Encl:

- Q3 and Q4 reports to EPA for FFYs 2019 & 2020 and FFYs 2021-2022 DERA State Grants for the PA State Clean Diesel Grant Program.