

**Semi Annual Report to the Trustee  
Commonwealth of Pennsylvania  
January 2022  
(Reporting Period – July 1, 2021 through December 31, 2021)**

**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 has developed an Electric Vehicle Roadmap<sup>1</sup> identifying goals for the distribution of electric vehicle charging infrastructure (EMA 9). Pennsylvania has participated in the State Clean Diesel Grant Program for many years prior to the establishment of the trust fund and plans to continue participating (EMA 10).

PA DEP has created a suite of programs called Driving PA Forward, that includes eight programs to disburse the trust fund monies. All ten EMAs are included across these eight programs. This is consistent with PA DEP’s stated goal in its Beneficiary Mitigation Plan to offer funding for all EMAs.

**Status of each EMA:** PA DEP intends to offer funding under each 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.

**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

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)
- Onroad Rebate Program

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

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 before the grant recipient applies for reimbursement from PA DEP.
- *Actual or Projected Termination Date*
  - Application periods: Application period opened from 8:00am on July 23, 2021 and closed at 4:00pm on October 9, 2021. 12 applications were received.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in late Spring/early Summer 2022.
- *Implementation*
  - CY2018-2019 – 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 – 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.
  - CY2018-2019 – Total awarded grants: \$5,758,089.75 to eight EMA 1 projects (see EMA 2 for other projects).
  - CY2020 – Total awarded grants: Total awarded grants: \$1,706,788.00 to two EMA 1 projects (see EMA 2 for other projects).
  - CY2021 – Applications still under review; project selection coming soon.
  - Anticipated cumulative grant award outcomes: (x103) 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 January 25, 2021.
    - FR0007: \$1,323,179.00 requested on December 15, 2021 and pending approval by the Trustee.
  - 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 (\$45,806.51 total shared EMA 1 costs for Onroad Rebates and Truck & Bus Fleet Grants) requested on December 15, 2021 and pending approval by 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 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: Application period open from 8:00am on July 23, 2021 through 4:00pm on October 15, 2021. 55 applications were received.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in late Spring/early Summer 2022.
- *Implementation*
  - CY2018-2019 – No rebates were issued to EMA 1 projects under this program.
  - CY2020 – 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.
  - CY2020 – PA DEP issued (x11) rebate vouchers for \$1,946,161.75 to replace (x28) EMA 1 eligible vehicles under this program.
  - CY2021 – Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
    - Up to 70.0 percent for a government-owned vehicle replacement project.
    - CY2021 - PA DEP issued (x1) rebate voucher for \$68,744.00 to replace (x1) EMA 1 eligible vehicle under this program.
    - Additional applications for CY21 pending review.
  - Anticipated cumulative rebate award outcomes: (x10) diesel-to-diesel government-owned Class 8 truck replacements; (x4) diesel-to-CNG government-owned truck replacements; (x14) non-government Class 8 truck replacements, and (x1) diesel-to-diesel non-government drayage truck replacement. (x29 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 on December 15, 2021 and pending approval by the Trustee.
  - 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 (\$45,806.51 total shared EMA 1 costs for Onroad Rebates and Truck & Bus Fleet Grants) requested on December 15, 2021 and pending approval by 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: Application period open from 8:00am on July 23, 2021 through 4:00pm on October 9, 2021. 12 were applications received.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in late Spring/early Summer 2022.
- *Implementation*
  - CY2018-2019 – Funding percentages: PA DEP committed to reimburse up to 44.4 percent for a government owned vehicle replacement with electric project.
  - CY2018-2019 – Total awarded grants: \$1,104,000 to (x1) EMA 2 project (see EMA 1 for other projects).
  - CY2020 – 25.0 to 30.0 percent for public school district-affiliated school bus replacement projects.
  - CY2020 – Total awarded grants: Total awarded grants: \$1,381,540 to (x3) EMA 2 projects (see EMA 1 for other projects).
  - CY2021 – Applications still under review; project selection coming soon.
  - Anticipated cumulative grant award outcomes: (x2) diesel-to-electric transit 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.

- FR0007: \$22,547.56 (\$45,095.12 total shared EMA 2 costs for Onroad Rebates and Truck & Bus Fleet Grants) requested on December 15, 2021 and pending approval by 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: Application period open from 8:00am on July 23, 2021 through 4:00pm on October 15, 2021. 55 were applications received.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in late Spring/early Summer 2022.
- *Implementation*
  - CY2018-2019 – Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
    - up to 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.
  - 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).
  - CY2020 – Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
    - 23.9 to 39.5 percent for government owned vehicle replacement projects.
  - CY2020 – PA DEP issued (x50) rebate vouchers for \$4,280,937.16 to replace (x144) EMA2 eligible vehicles under this program.
  - CY2021 - Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
    - 27.8 to 30.0 percent for public school district-affiliated school bus replacement projects.
    - Additional applications for CY21 pending review.
  - CY2021 – PA DEP issued (x9) rebate vouchers for \$837,000.00 to replace (x31) EMA2 eligible vehicles under this program. Additional applications for CY21 pending review.
- Anticipated cumulative rebate award outcomes: (x333) diesel-to-diesel school bus replacements; (x45) biodiesel-to-biodiesel (B5) school bus replacements, (x53) diesel-to-LPG (propane) school bus replacements, (x3) diesel-to-electric (including infrastructure)

replacements, and (x1) diesel-to-diesel shuttle bus replacement. (x435 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 on December 15, 2021 and pending approval by the Trustee.
  - 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: \$22,547.56 (\$45,095.12 total shared EMA 2 costs for Onroad Rebates and Truck & Bus Fleet Grants) requested on December 15, 2021 and pending approval by 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: This program opened for Round 1 applications from 8:00am on January 31, 2020 through 4:00pm on June 5, 2020. The program reopened for Round 2 applications from 8:00am on November 6, 2020 through 4:00pm on March 19, 2021.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in Spring 2022.
- *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 – 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 1 – Total awarded grants: PA DEP awarded \$1,260,000 to one (1) EMA 3 project during this reporting period.

- CY2020-2021: Round 2 - 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.
- CY2020-2021: Round 2- Total awarded grants: PA DEP awarded \$8,689,104.00 to (x3) EMA 3 projects during this reporting period.
- 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. PA DEP expects to request disbursement for these projects in 2022.
  - Administrative expenditures to date: PA DEP has approximately \$16,049.97 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: Round 1 of this program opened for applications from January 31, 2020 through June 5, 2020. The program reopened for Round 2 applications from November 6, 2020 through March 19, 2021.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in Spring 2022.
- *Implementation*
  - CY2020-2021 – 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).
  - Total awarded grants: No grants were awarded during this reporting period under this program for this EMA.
  - 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. PA DEP expects to request disbursement for these projects in 2021 or 2022.
  - 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 funds projects eligible under this EMA through the Ocean-Going Vessel Shorepower Grant Program. 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: PA DEP plans to reopen this program and offer funding in spring 2022.
- *Implementation*
  - Funding percentages: PA DEP offered up to 75 percent reimbursement for government applicants and up to 25 percent reimbursement for non-government applicants.
  - Total awarded grants: No grants were awarded during this reporting period; no applications were received.
  - 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. PA DEP expects to request disbursement for projects under this EMA in 2021 or 2022.
  - 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)
- 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: Application period open from 8:00am on July 23, 2021 through 4:00pm on October 9, 2021. 12 applications were received.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in late Spring/early Summer 2022.
- *Implementation*
  - CY2020 – 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).
  - CY2020 – Total awarded grants: No grants were awarded under this EMA during this reporting period.
  - Anticipated cumulative 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. PA DEP expects to request disbursement for projects under this EMA in 2022.
  - 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.

#### 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: Application period open from 8:00am on July 23, 2021 through 4:00pm on October 15, 2021. 12 were applications received.
- Next available funding: PA DEP plans to reopen this program and offer additional funding in late Spring/early Summer 2022.
- *Implementation*
  - CY2018-2019 – PA DEP issued (x9) rebate vouchers for \$225,000.00 to replace (x9) EMA 6 eligible vehicles under this program (See EMA 2 for additional rebates).
  - CY2018-2019 – 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.
  - CY2020 – 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, and
    - up to 70.0 percent for government-owned vehicle replacement projects.
  - CY2021 – 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). Application review for the CY21 funding period ongoing.
  - CY2021 – No rebate vouchers issued under this EMA, during the reporting period. Application review for the CY2021 funding period on-going.
  - Anticipated cumulative rebate award outcomes: (x17) diesel-to-diesel Class 4-7 truck replacements and (x1) diesel-to-propane Class 4-7 truck replacement. (x18 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.
  - Administrative expenditures to date: PA DEP has an additional approximately \$2,581.38 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 – CY2019-2020: Rounds 1 & 2

- *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: This program was opened for Round 1 applications from 8:00am on June 21, 2019, through 4:00pm on November 15, 2019. The program reopened for Round 2 applications from 8:00am on November 6, 2020, through 4:00pm on March 5, 2021.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding in early 2022.
- *Implementation*
  - CY2019-2020 – 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.
  - Total awarded grants: No grants were awarded during this 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 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 awarded.
  - Administrative expenditures to date: PA DEP has approximately \$10,026.02 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 – CY2019-2020: Rounds 1 & 2

- *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: This program was opened for Round 1 applications from 8:00am on June 21, 2019, through 4:00pm on November 15, 2019. The program reopened for Round 2 applications from 8:00am on November 6, 2020, through 4:00pm on March 5, 2021.
  - Next available funding: PA DEP plans to reopen this program and offer additional funding later in early 2022.
- *Implementation*

- CY2019-2020 – Funding percentages: PA DEP committed to reimburse the following percentages of eligible project costs:
  - PA DEP committed to reimburse up to 60 percent for government-owned, all-electric forklift and port cargo handling equipment replacement projects, and up to 40 percent for non-government-owned, all-electric forklift or port cargo handling equipment replacement projects.
  - Actual: up to 70.0 percent for a single government-owned electric vehicle or equipment replacement project.
- Total awarded grants: PA DEP awarded \$435,960.00 to (x1) EMA 8 project during this reporting period.
- Anticipated grant award outcomes: 2 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. PA DEP expects to request disbursement for this project in 2022 or 2023.
  - Administrative expenditures to date: PA DEP has approximately \$10,026.02 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 at 8:00am on October 29, 2021 and closes at 4:00pm on January 31, 2022.
  - Next available funding: CY2022 TBD after selection and award of CY2021 grants.
- *Implementation*
  - CY2018-2019 – Funding percentages: PA DEP committed to reimburse 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.
  - CY2018-2019 – Total awarded grants: \$2,679,112.77.00 to (x11) EMA 9 projects under this grant program, during this reporting period.

- CY2020 – 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.
- CY2020 – PA DEP awarded \$1,715,066 to (x8) EMA 9 projects under this grant program, during this reporting period.
- Anticipated cumulative grant award outcomes: Installation of (x81) 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 on December 15, 2021 and pending approval by the Trustee.
  - 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 (\$77,964.59 total shared EMA 9 costs between Level 2 EVSE Rebates and DC Fast Charge & Hydrogen Fueling Grants) requested on December 15, 2021 and pending approval by the Trustee.

Level 2 Electric Vehicle (EV) Charging Rebate Program – Version 1 (CY2018-2019); Version 2 (CY2020); Version 3 (2021)

- *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 2 opened for applications (continuous) from December 2, 2019 through April 30, 2021. Version 3 opened for applications on May 6, 2021 and will remain open until funds are awarded for the installation of an additional (x750) Level 2 EV charging plugs.
  - Next available funding: Currently accepting applications. Next offering will be determined when the number of plugs installed in Version 3 reaches (x750).
- *Implementation*
  - Version 1 – 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 1 – 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. PA DEP approved (x221) voucher redemptions totaling \$3,094,125.00, for EMA 9 projects.
  - Version 2 – 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 2 – 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 has approved (x190) of the issued vouchers for reimbursements totaling \$1,863,208.00 for EMA 9 (Level 2) projects.
  - Version 3 – 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 (x128) rebate vouchers for Version 3, totaling \$1,467,064, for the installation of Level 2 chargers. DEP has approved (x32) of the issued vouchers for reimbursements totaling \$372,103.00 for EMA 9 (Level 2) projects.
  - Anticipated cumulative rebate award outcomes: Installation of (x1,346) new Level 2 EV charging plugs across Pennsylvania are complete. In total, installation of (x1,725) 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 on December 15, 2021 and pending approval by the Trustee.
  - 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 (\$77,964.59 total shared EMA 9 costs between Level 2 EVSE Rebates and DC Fast Charge & Hydrogen Fueling Grants) requested on December 15, 2021 and pending approval by 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, FY2019-2020

- *Development*
  - PA DEP modified its existing program to fund a variety of diesel emission reduction projects authorized by the Diesel Emission Reduction Act<sup>2</sup>. 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 reopen this program for FY2020 and offer additional funding in July/August 2022.
- *Implementation*
  - FY2017-2018 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.
  - 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).
  - FY2019 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.
  - FY2019 Total awarded grants: \$2,400,969.00 to (x9) 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 to \$1,957,368.00.
  - FY2020 solicitation closed on January 7, 2022 at 4:00pm. Applications will be reviewed and scored, and awards will likely be announced late winter/early spring 2022.
  - Anticipated grant award outcomes: (x78) diesel-to-diesel school bus replacements; (x29) diesel-to-CNG refuse truck replacements; (x12) diesel-to-diesel refuse truck replacements; (x2) diesel-to-diesel trash compactor vehicle replacements; (x1) diesel-to-diesel bulldozer replacement; (x2) diesel-to-diesel street sweeper replacements; (x1) diesel-to-diesel crawler tractor replacement; (x2) diesel-to-diesel Class 8 articulated truck replacements; (x1) diesel-to-electric bulldozer replacement; and installation of idle reduction technology on (x6) locomotives. (x128 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.

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

• *Summary of Cumulative Costs Expended Through Reporting Period*

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

<b>Available Funds</b>	<b>FY2019</b>	<b>FY2020</b>	<b>Combined</b>
<b>EPA Funds (base and bonus)</b>	\$500,532.00	\$553,494.00	\$1,054,026.00
<b>Trust Funds (voluntary match)</b>	\$2,154,309.00	\$2,154,310.00	\$4,308,619.00
<b>Total Available</b>	\$2,654,841.00	\$2,707,804.00	\$5,362,645.00

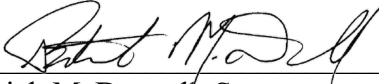
- Project disbursements to date: The following are the submitted, approved, and/or pending project reimbursements requested by PA DEP in Funding Requests (FRs).
  - FR0001: \$116,401.40 requested and approved by Trustee on September 20, 2019. These project payments were matched by \$174,602.10 in EPA funds.
  - FR0003: \$2,073,209.68 requested and approved by Trustee on September 14, 2020. These project payments were matched by \$605,721.82 in EPA funds.
  - FR0004: \$146,728.84 requested and approved by the Trustee on January 25, 2021. These project payments were matched by \$38,943.00 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.
  - PA DEP has approximately \$27,963.78 in pending administrative costs that will be submitted with the next eligible funding request that includes EMA 10 projects.

**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, that will be included in various EMA submissions where there is room under the 15 percent cap. PA DEP has approximately \$59,812.02 in pending administrative costs that will be submitted as appropriate with the next eligible funding request(s).



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.



\_\_\_\_\_  
Patrick McDonnell, Secretary  
Pennsylvania Department of Environmental Protection

2/11/2022

\_\_\_\_\_  
Date

Attachments:

- Q4 Report to EPA for FYs 2019 & 2020 Pa State Clean Diesel Grant Program (a.k.a DERA).