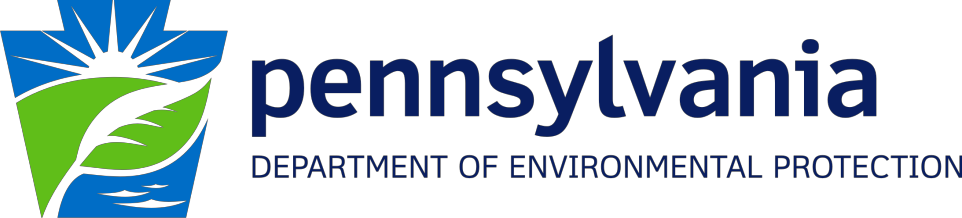
**Pennsylvania State Clean Diesel Grant Program**

**Guidelines and Application**





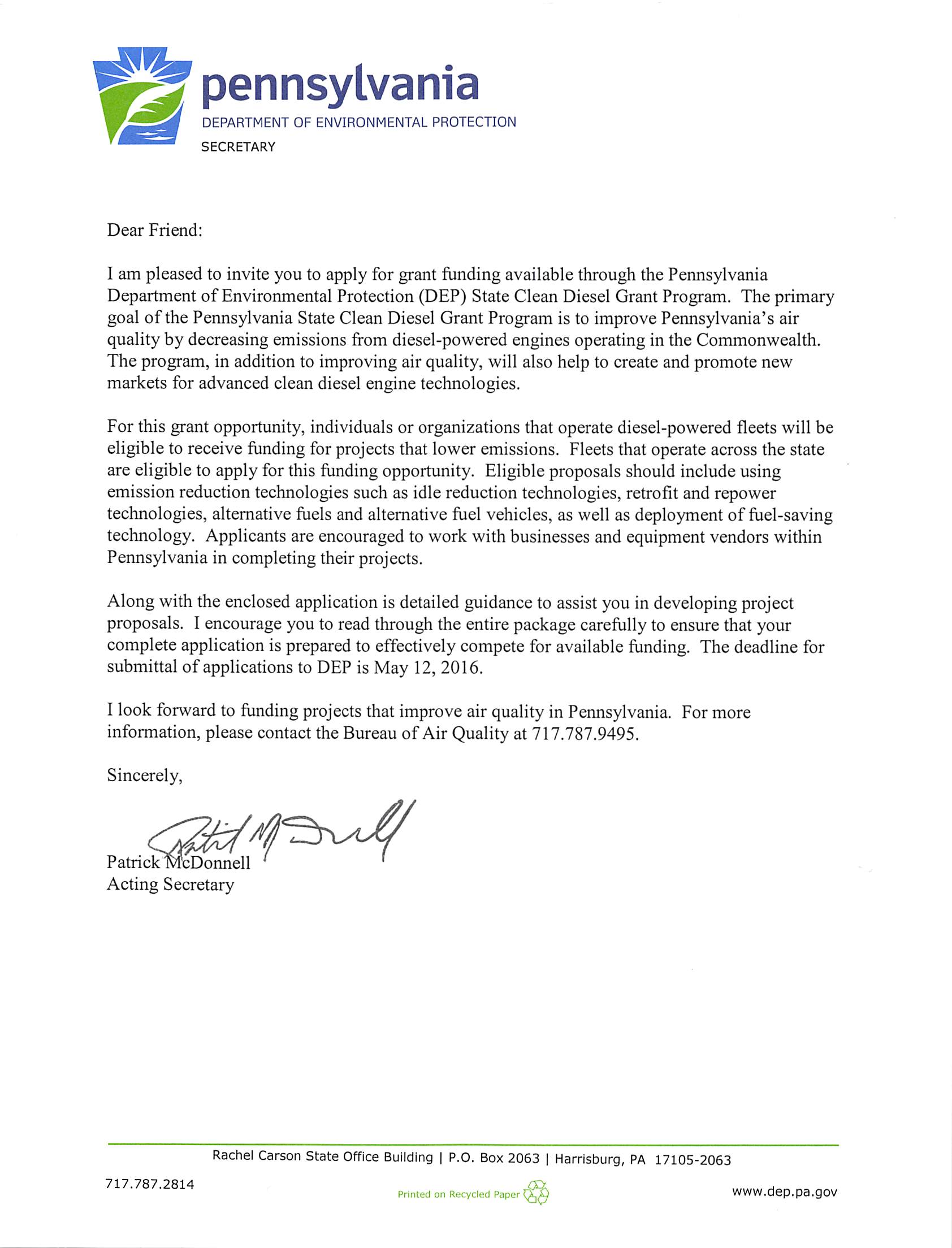
## Fiscal Years (FY) 2014-2016

**Tom Wolf**

**Governor**

**Patrick McDonnell Acting Secretary**

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## What’s New and Important Information

**Project Funding –** There is $396,904 available from DEP for this round of funding under the PA State Clean Diesel Grant Program, which is the second round this year for offering these funds.

**Project Period** – The project period end date is September 30, 2017. Extensions may be possible; extension requests will be evaluated on a case-by-case basis by DEP. Without extensions, the project period will be approximately 6 months.

**Submission Format** – Several changes have occurred to the application form and instructions. The application is now a ‘fill-in-the-blank’ form. Additionally, changes were made to the attachment requirements. These changes include making the Executive Summary part of the ‘fill-in-the-blank’ application form and minor revisions to the requirements and headings of the other required attachments. The Executive Summary is still a separate attachment if the applicant is using the ‘plain text’ application.

**Application Scoring** – The application scoring matrix and scoring instructions are included in this document.

**Application Submission Period** – The application submission period for this second round of funding begins upon publication of the notice of availability in the *Pennsylvania Bulletin* and ends   
May 12, 2017.

**Webinar** – This year, DEP staff hosted a webinar during the initial application period to answer questions from applicants. Please see Section IX for instructions on how to access the recorded webinar.

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# Pennsylvania State Clean Diesel Grant Program Guidelines and Application Table of Contents

1. [Funding Opportunity Description 1](#_TOC_250009)
   1. Background 1
   2. Scope of Work 2
2. [Award Information 3](#_TOC_250008)
   1. Available Funding 3
   2. Project Period 3
   3. Funding Type 3
   4. Technology Compatibility 3
3. [Eligibility Information 3](#_TOC_250007)
   1. Eligible Applicants 3
   2. Ineligible Applicants 4
   3. Eligible Diesel Vehicles, Engines, and Equipment 4
   4. Ineligible Vehicles, Engines, and Equipment 6
   5. Eligible Project Types 7
   6. Ineligible Project Types 16
   7. Funding Restrictions 16
4. [Cost Share and Program Income Requirements 19](#_TOC_250006)
   1. Mandatory Cost Share 19
   2. Voluntary Cost Share 21
   3. Program Income 22
5. [General Conditions, Reporting, and Project Monitoring 22](#_TOC_250005)
   1. Public Disclosure of Application Documents 22
   2. Additional Conditions 22
   3. Reporting Requirements 23
   4. Financial Monitoring 23
   5. Project Status and Monitoring 24
6. [Glossary 25](#_TOC_250004)
7. [Application Instructions 28](#_TOC_250003)
8. [Application Review, Scoring, and Selection 38](#_TOC_250002)
   1. Application Review and Scoring 38
   2. Project Selection 40
   3. Notification of Applicants 40
9. [Webinar Information 41](#_TOC_250001)
10. [How to Apply 41](#_TOC_250000)

**Pennsylvania State Clean Diesel Grant Program Guidelines and Application Table of Contents (cont.)**

## FY2014-2016 Application Attachments:

FY2014-2016 Application Form

Attachment D: Vehicle/Equipment Description Reporting Form (Microsoft Excel format)

## See Section VII. Application Instructions for guidance on creating Attachments A, B, C, and E, which must be included in the application package submission. Attachment D must also be included but a template is provided. If using the Plain Text application, an Executive Summary Attachment is also required.

# Pennsylvania State Clean Diesel Grant Program

## Funding Opportunity Description

1. Background

Reducing emissions from diesel engines is one of the most important air quality challenges facing the Commonwealth of Pennsylvania (Commonwealth or PA) and the country as a whole. Pennsylvania, as one of the most populous states in the country, has one of the largest vehicle populations, including a large population of diesel vehicles and equipment. Pennsylvania also contains a number of areas with high population densities where diesel vehicles congregate.

Pennsylvania is a major freight corridor, for both rail and trucking, for the Northeast United States. Pennsylvania contains many interstate highways that provide quick access to major north-south and east-west routes and the economically significant Northeast United States for all truck drivers traveling in the Commonwealth. There are approximately 180,762 heavy-duty diesel vehicles registered in Pennsylvania, but the number actually operating in or traveling through Pennsylvania is likely two to three times greater than the number of registered vehicles.

Pennsylvania also has warehouses, intermodal facilities, several international airports, three ports used by commercial marine vessels, numerous railroads, and is a major destination for freight transport to and from these facilities. Many of these facilities also utilize diesel nonroad vehicles and engines. The diesel population of large nonroad vehicles and engines in Pennsylvania is approximately 159,270. The actual number is likely higher in Pennsylvania due to increased oil/gas drilling activities and forestry activities associated with the recent drilling boom in Pennsylvania. In addition to freight, Pennsylvania also has a significant commuter rail system, including both systems run by transit agencies and Amtrak lines crossing the Commonwealth.

Pennsylvania has 38 fixed-route transit systems, including the 6th and 25th largest in the United States1. Pennsylvania Department of Transportation (PennDOT) records indicate that 8,401 transit buses were registered in Pennsylvania in 2014, and that 18,582 school buses were registered in the Commonwealth in 2014.2

New standards for diesel vehicles and equipment promulgated by the U.S. Environmental Protection Agency (EPA) will ensure that new medium-duty and heavy-duty diesel engines will be less polluting. Many of these diesel engines, however, can operate for 25 to 30 years before replacement is required, so it may be many years before existing equipment is replaced with new, cleaner equipment due to normal fleet turnover. A large population of older diesel engines unaffected by the new standards will continue to operate in the Commonwealth into the future. Many strategies and programs exist to make these engines operate more cleanly. Replacing, retrofitting, or repowering older diesel vehicles and engines are cost-effective strategies to reduce emissions of fine particulate matter (PM2.5) and precursor pollutants for the formation of PM2.5 and ozone, including nitrogen oxides (NOX) and volatile organic compounds (VOC), by as much as 90% or more. In 2011, diesel emissions from on-road and nonroad diesel-powered mobile sources (not including marine, rail, or aviation) in the United States accounted for approximately 235,295 tons of PM2.5 and 4,129,029 tons of NOX. According to EPA’s 2011 National Emission Inventory, diesel emissions from on-road and nonroad diesel-powered mobile sources (not including marine, rail, or aviation) in Pennsylvania accounted for approximately 121,019 tons per year (tpy) of NOX, 10,624 tpy of VOC, 6,757 tpy of PM2.5, and 8,042 TPY of

1 American Public Transportation Association, 2013 Public Transportation Fact Book, October 2013, Table 3.

2 Pennsylvania Department of Transportation vehicle registration data, CY2014

coarse particulate matter (PM10) in 2011. Additional diesel emissions result from the operation of diesel-powered marine, rail, aviation and other diesel engines in use in Pennsylvania. In order to achieve the greatest emission reductions possible, applications receive higher scores for higher emission reductions.

To protect public health and air quality, the EPA is authorized by the Diesel Emission Reduction Act (DERA) (42 U.S.C. 16131 et seq,) to allocate funding to state governments to establish grant programs for diesel emission reduction projects. Each state’s allocation is dependent upon the number of states participating in each funding year and the total funding allocated to the state allocation portion of the program each year. PA’s program is the PA State Clean Diesel Grant Program, administered by the PA Department of Environmental Protection (DEP).

1. Scope of Work

The primary goal of the PA State Clean Diesel Grant Program is to improve the Commonwealth’s air quality by decreasing emissions from diesel-powered mobile sources through funding diesel emission reduction projects. This goal supports EPA’s 2014-2018 Strategic Plan Goal 1, ‘Addressing Climate Change and Improving Air Quality,’ Objective 1.2, ‘Improve Air Quality,’ which states, “achieve and maintain health- and welfare-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants.” DEP will consider projects in all of the categories listed below as eligible projects. A single proposal may target multiple fleets, fleet types, and/or diesel emission reduction solutions. Eligible diesel emission reduction solutions include, but are not limited to: verified emission control technologies such as exhaust controls; engine upgrades; verified idle reduction technologies; certified engine repowers; aerodynamic technologies; and/or certified vehicle or equipment replacement. Eligible diesel vehicles, engines, and equipment may include buses, medium-duty or heavy-duty trucks, nonroad engines, equipment or vehicles used in construction, cargo handling, agriculture, mining or energy production, marine engines and locomotive engines. See full eligibility information for applicants and projects in Section III. Eligibility Information.

## Award Information

1. Available Funding

The PA State Clean Diesel Grant Program is primarily funded through the EPA’s State Clean Diesel Program. Additional or other sources of state funding, when available, may also be applied to the PA State Clean Diesel Grant Program. This is the second round of funding for this program this year. The remaining fiscal year (FY) 2014-2016 funding available under the State Clean Diesel Grant Program is $396,904. Multiple projects may be funded from the total available. Partial funding is also possible, if deemed appropriate by DEP staff.

1. Project Period

The project period for the FY 2014-2016 PA State Clean Diesel Grant Program will be from the date a grant agreement is fully executed, unless an earlier date is agreed to in writing, to September 30, 2017. Project period extensions may be allowed past September 30, 2017. ***Any applicant who begins a project and incurs costs before receiving a fully executed grant agreement does so at his or her own risk.***

1. Funding Type

The PA State Clean Diesel Grant Program is offering funding as a reimbursement grant program. This means a grantee will pay all project costs and submit proof that project invoices have been paid and proof of project work completion to DEP for reimbursement. DEP will not approve reimbursement requests for unpaid invoices. Detailed invoice requirements and submission instructions will be included in the grant agreement with successful applicants.

1. Technology Compatibility

Technology changes will not be allowed after a project has been selected for funding. If technology compatibility issues arise, DEP may elect to terminate the grant agreement, at which time any funding received by the grantee must be returned to DEP, unless otherwise stated in writing by DEP.

## Eligibility Information

1. Eligible Applicants

Organizations that operate eligible diesel-powered fleets throughout the Commonwealth may apply to the PA State Clean Diesel Grant Program. Eligible organizations include:

* 1. Businesses – corporations, partnerships, sole proprietorships, limited liability companies, business trusts or other legal business entities incorporated in or registered with the PA Department of State, Bureau of Corporations and Charitable Organizations, to do business in the Commonwealth.
  2. Incorporated Nonprofit – an organization as described in section 501(c)(3) of the Federal Internal Revenue Code of 1954, as amended. The organization must be incorporated under PA law or registered with the PA Department of State, Bureau of Corporations and Charitable Organizations, to do business in the Commonwealth.
  3. School Districts.
  4. Municipal Governments and Municipal Authorities.
  5. Other State Agencies.

1. Ineligible Applicants
   1. Non-profit organizations described in Section 501(c)(4) of the Internal Revenue Code that engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act of 1995 are not eligible to apply.
   2. Federal government agencies.
   3. Individuals applying as individuals, not on behalf of an eligible applicant.
2. Eligible Diesel Vehicles, Engines, and Equipment

Eligible vehicles, engines and equipment include the following diesel-powered sources:

* 1. School buses (see glossary for definitions).

## Table 1: School Bus Eligibility

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Current Engine Model Year** | **DOC** | **DOC**  **+ CCV** | **DPF** | **Replace with 2013 or Newer** | **Repower or Conversion of Engine to Higher Certification Level** | **Repower, Replacement or Conversion to All- Electric** |
| **1991 to 2003** | Yes | Yes | Yes | Yes | Yes | Yes |
| **2004 to 2006** | Yes | Yes | Yes | No | Yes | Yes |
| **2007 to current** | No | No | No | No | No | No |

* + 1. No funds awarded under the PA State Clean Diesel Grant Program shall be used to retrofit, repower, convert or replace a school bus with engine model year (MY) 1990 or older, or replace school buses with engine MY 2004-2006 other than with an all- electric vehicle, or retrofit, replace, repower or convert school buses with engine MY 2007 or newer. Refer to Table 1 for further explanation.
  1. Transit buses and medium-duty or heavy-duty trucks – Class 5 through Class 8 (see glossary for definitions).

## Table 2: Transit Bus and Class 5 – Class 8 Highway Vehicle Eligibility

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Current Engine Model Year** | **DOC** | **DPF** | **SCR** | **Replace with 2010 or Newer (Dray Only)** | **Replace with 2013 or Newer** | **Repower or Conversion of Engine to Higher Certification Level** | **Repower, Replacement or Conversion to All-Electric (Includes Dray)** |
| **1991 to 2003** | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **2004 to 2006** | Yes | Yes | Yes | No | No | Yes | Yes |
| **2007 to 2009** | No | No | Yes | No | No | No | No |
| **2010 to current** | No | No | No | No | No | No | No |

* + 1. No funds awarded under the PA State Clean Diesel Grant Program shall be used to

retrofit, repower, convert or replace a transit bus, medium-duty, or heavy-duty highway vehicle with engine MY 1990 or older, or to retrofit engine MY 2007 or newer with DOCs or DPFs, or retrofit engine MY 2010 or newer with SCR, or replace engine MY 2004-2006 other than with an all-electric vehicle, or replace,

repower or convert engine MY 2007 or newer. Refer to Table 2 for further explanation.

* 1. Marine engines.

## Table 3: Marine Engine Eligibility

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Current Engine Tier** | **Repowered or Replaced New Certified Engine** | | | | **Certified Engine Upgrade (Remanufacture System)** | **Verified Engine Upgrade** |
| **Tier 1** | **Tier 2** | **Tier 3** | **Tier 4** |
| **Unregulated** | Yes | Yes | Yes | Yes | Yes | Yes |
| **Tier 1** | No | Yes | Yes | Yes | Yes | Yes |
| **Tier 2** | No | No | Yes | Yes | Yes | Yes |
| **Tiers 3 and 4** | No | No | No | No | No | No |

* + 1. To be eligible, marine engines must operate at least 1,000 hours per year.
    2. No funds awarded under the PA State Clean Diesel Grant Program shall be used to repower, replace or upgrade Tier 3 or Tier 4 marine engines, or to repower or replace marine engines from Tier 1 marine engine standard to Tier 1 marine engine standard, or from a Tier 2 marine engine standard to a Tier 2 or lower marine engine standard. Refer to Table 3 for further explanation.
  1. Locomotives.

## Table 4: Locomotive Eligibility

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Current Locomotive Tier** | **New Locomotive Tier** | | | | | **Verified Exhaust Controls** |
| **Tier 0+** | **Tier 1+** | **Tier 2+** | **Tier 3** | **Tier 4** | **SCR** |
| **Unregulated and Tier 0** | Yes | Yes | Yes | Yes | Yes | No |
| **Tier 0+ and Tier 1** | No | Yes | Yes | Yes | Yes | Yes |
| **Tier 1+** | No | No | Yes | Yes | Yes | Yes |
| **Tier 2** | No | No | Yes | Yes | Yesa | Yes |
| **Tier 2+** | No | No | No | Yesa | Yesa | Yes |

* + 1. Applies to switcher locomotives only.
    2. To be eligible, locomotives must operate at least 1,000 hours per year.
    3. No funds awarded under the PA State Clean Diesel Grant Program shall be used to retrofit unregulated or Tier 0 locomotives with SCR, or to upgrade, repower or replace locomotives from: Tier 0+/1 to Tier 0+ or lower; Tier 1+/2 to Tier 1+ or lower; Tier 2 to Tier 1+ or lower; or, from Tier 2+ to Tier 2+ or lower.
    4. No funds awarded under the PA State Clean Diesel Grant Program shall be used to upgrade, repower or replace line-haul locomotives from Tier 2 to Tier 4, or to upgrade, repower or replace line-haul locomotives from Tier 2+ to Tiers 3 and 4.
    5. No funds awarded under the PA State Clean Diesel Grant Program shall be used to install Automatic Engine Start-Stop technologies on locomotives currently certified to Tier 0+ or higher.
    6. Note: Tier 0+, Tier 1+, and Tier 2+, Tier 3, and Tier 4 represent locomotives manufactured or remanufactured under the more stringent Tier standards promulgated under the 2008 (current) locomotive and marine rule. Tier 0, Tier 1, and Tier 2 represent locomotives originally manufactured or remanufactured under the less stringent Tier standards promulgated in 1997.
  1. On-road or nonroad engines, equipment or vehicles used in:
     1. Construction;
     2. Handling of cargo (including at a port or airport);
     3. Agriculture;
     4. Mining; or
     5. Energy production (not including stationary generators and pumps).

## Table 5: Nonroad Engine Eligibility

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Current Engine Tier** | **Repowered or Replaces 2013 or Newer Certified Engine** | | | | |
| **Tier 0** | **Tier 1** | **Tier 2/3** | **Tier 4** | **All-Electric** |
| **Tier 0 / 1** | No | No | Yes | Yes | Yes |
| **Tier 2 / 3** | No | No | No | Yes | Yes |

1. No funds awarded under the PA State Clean Diesel Grant Program shall be used to repower or replace nonroad Tier 0 (unregulated) engines to a nonroad Tier 1 or lower nonroad engine standard or from a Tier 2 nonroad engine standard to a Tier 3 or lower nonroad engine standard. Refer to Table 5 for further explanation.
2. No funds awarded under the PA State Clean Diesel Grant Program shall be used to retrofit, repower, upgrade or replace a nonroad engine or equipment that has less than seven years of useful life remaining. A table distinguishing which nonroad engine model years EPA has determined to have at least seven years of useful life remaining, based on the type and age of vehicle, can be found at [www.epa.gov/sites/production/files/2015-10/documents/fy14-nonroad-remaining-](http://www.epa.gov/sites/production/files/2015-10/documents/fy14-nonroad-remaining-) useful-life.pdf.
3. To be eligible, nonroad engines or equipment must operate 500 hours or more per year.
4. Ineligible Vehicles, Engines, and Equipment

Ineligible vehicles, engines, and equipment include the following sources:

* 1. Class 1-4 vehicles (Vehicles with a gross vehicle weight rating (GVWR) of 16,000 or fewer pounds).
  2. Non-diesel-powered vehicles, engines, and equipment.
  3. Vehicles, engines, and equipment with less than three years of useful life remaining or scheduled for repower or replacement within less than 3 years of the project completion date are not eligible for funding. See Section III.F. Ineligible Project Types for additional information about repower and replacement restrictions relating to normal attrition schedules.
  4. A bus or medium-duty or heavy-duty highway vehicle that is a MY 1993 vehicle or older.
  5. Nonroad engines and equipment that operate 500 hours or less per year.
  6. Locomotive or marine engines that operate 1,000 hours or less per year.
  7. Vehicles, engines, or equipment designated for retrofit, repower, or replacement where the majority of its annual operation time DOES NOT occur within the Commonwealth.
  8. Vehicles being replaced or repowered that are not operational or that DO NOT have a valid Pennsylvania state registration, if required.

1. Eligible Project Types

See Section IV. Cost Share for cost-share information for each project type.

* 1. **Exhaust Controls:** Exhaust controls include pollution control devices installed in the exhaust system (such as oxidation catalysts and particulate matter filters), or systems that include crankcase emission control (like a closed crankcase filtration system). Each applicant requesting funding for diesel particulate filters should datalog the exhaust temperature of all proposed vehicles before an application is submitted, and, if the results indicate that the project is feasible for the vehicles in question, include the results with the submitted application to ensure DEP has adequate evidence to determine whether the project can be completed as proposed. See Section II.D. relating to technology compatibility.

A list of eligible, EPA-verified exhaust control technologies is available at: <https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>; a list of eligible, California Air Resources Board (CARB) verified exhaust control technologies is available at: <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>. Verified technologies proposed for funding under this project type must be specifically named on one of these lists at the time of application submission to DEP and must only be used for the vehicle/equipment application specified on the list. If an applicant is selected for funding, the actual exhaust control technologies used by the grant recipient must be specifically named on one of these lists at the time of acquisition, and used only for the vehicle/equipment application specified on the list.

* 1. **Engine Upgrades:** This project type is only applicable to nonroad, marine, and locomotive engines. Generally, an engine upgrade involves the removal of parts on an engine during a rebuild and replacement with parts that cause the engine to represent an engine configuration which is cleaner than the original engine. Some nonroad and marine engines are able to be upgraded to reduce their emissions by applying manufacturer upgrades that are retrofits currently verified by EPA or CARB as a package of components demonstrated to achieve specific levels of emission reductions. Some locomotives and marine engines are able to be upgraded through the application of a certified remanufacture system that is used to rebuild the engine to represent a cleaner engine configuration. Engine upgrades may not be available for all engines, and not all upgrades may achieve an emission reduction benefit. Proposals for upgrades should include a discussion of the availability of engine upgrade kits/systems and indicate the pre- and post-project emission standard levels of the engines in order to demonstrate that the upgrade will result in an emission reduction benefit.

To be eligible for funding, the upgrade must either be a verified retrofit, as described above, or a certified remanufacture system that will result in an emissions benefit by

rebuilding the engine to a cleaner engine configuration. For an engine to be eligible for an upgrade, the engine must be currently operating and performing its intended function. If a certified remanufacture system for a locomotive includes a full engine replacement, the requirements below in Section III.E.5. (Certified Engine Repowers) will apply.

A list of eligible, EPA-verified engine upgrade technologies is available at: <https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>. Lists of certified remanufacture systems for locomotives and marine engines, and additional information on remanufacture systems, are available at: <https://www3.epa.gov/otaq/certdata.htm>. Technologies proposed for funding under this project type must be specifically named on one of these lists at the time of application submission to DEP and must only be used for the engine/equipment/vehicle application specified on the list. If an applicant is selected for funding, the actual engine upgrade technology used by the grant recipient must be named on EPA’s list of certified remanufacture systems or EPA or CARB’s Verified Exhaust Control Technologies list at the time of acquisition and used only for the engine/equipment/vehicle applications specified on the lists.

* 1. **Verified Idle Reduction Technologies:** An idle reduction project is generally defined as the installation of a technology or device that reduces unnecessary idling of diesel vehicles or equipment and/or is designed to provide services (such as heat, air conditioning, and/or electricity) to vehicles and equipment that would otherwise require the operation of the main drive or auxiliary engine(s) while the vehicle is temporarily parked or remains stationary. Idle reduction technologies generally 1) are installed on a vehicle (e.g., bus, truck, locomotive, automobile, marine vessel, equipment, etc.) or at a location; 2) reduce unnecessary main engine idling of the vehicle or equipment; and/or,

3) provide services (e.g., heat, air conditioning, and/or electricity) to the vehicle or equipment that would otherwise require the operation of the main drive engine while the vehicle or equipment is temporarily parked or remains stationary. The reduction in idling will conserve diesel fuel, and must also lower emissions.

Lists of eligible, EPA-verified idle reduction technologies are available at: <https://www.epa.gov/smartway/learn-about-smartway-verified-technologies>under the heading “Information for Fleet Managers.” Technologies proposed for funding under this project type must be specifically named on one of these lists at the time of the application submission to DEP and may only be used for the vehicle/equipment application specified on the lists. The technology categories include: auxiliary power units and generator sets, battery air conditioning systems, thermal storage systems, electrified parking spaces (truck stop electrification), fuel-operated heaters, shore connection systems and alternative maritime power, shore connection systems for locomotives, and automatic shutdown/start-up systems for locomotives.

Please note that technologies for the electrification of engines/vehicles/equipment other than those specifically listed on EPA’s SmartWay Verified Technologies list cannot be considered verified idle reduction technologies, but those technologies may be eligible as a Repower (removal of a diesel engine and its replacement with an electric power source;

see Section III.E.5, below) or a Replacement (replacement of a diesel powered engine/vehicle/equipment with an eligible electric engine/vehicle/equipment; see Section III.E.6, below).

1. Verified Idle Reduction Technologies on Locomotives: Idle reduction technologies allow locomotive engine operators to reduce long-duration idling of the main propulsion engine by using an alternative technology.
2. Electrified Parking Spaces: Electrified Parking Spaces (EPS), also known as Truck Stop Electrification (TSE), operate independent of the truck’s engine and allow the truck engine to be turned off as the EPS/TSE system supplies heating, cooling, and/or electrical power. The EPS/TSE system provides off-board electrical power to operate:
   1. an independent heating, cooling, and electrical power system,
   2. a truck-integrated heating and cooling system, or
   3. a plug-in refrigeration system that would otherwise be powered by the main propulsion engine.
3. Marine Shore Power Connection Systems: Shore power systems allow maritime vessels to “plug into” an electrical power source instead of using diesel main or auxiliary engines while at port. Funding may support new installations or expansions of existing shore power systems. Due to the unique nature and custom design of marine shore power connection systems, DEP will review and approve the marine shore power connection system proposed by the applicant on a case-by-case basis.
   1. Marine Shore Power Criteria: Projects are eligible for funding on the condition that the following criteria are satisfied:
      1. Applicants must attest to compliance with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems).
      2. Shore power connection systems must be supplied with electricity from the local utility grid.
      3. Demonstration that the proposed system has the capacity, demand, and commitment to be utilized for more than 1,000 MW-hours per year. Smaller projects will be considered if the applicant can demonstrate that project benefits outweigh project costs with a lower level of utilization.
      4. If the project proposal is selected for funding, the final design of the marine shore power connection system will require specific DEP approval prior to purchase and installation.
      5. Applicants must commit to reporting usage information to DEP for five years after the system is operational.
      6. Shore power capable vessels docked at a berth where shore power is available must be required to turn off the vessel’s engines and utilize the shore power system, with limited exceptions for extreme circumstances.
   2. Marine Shore Power Project Description: Applicants proposing marine shore power connection systems should provide a project description that includes, but is not limited to:
      1. the annual number of ship visits to berth where the shore power system is to be installed;
      2. average hoteling (or idling) time per visit; and
      3. information about the fleet of vessels that has, or will have, the ability to use the shore-side connection system, including:
         1. the estimated annual number of ship visits to the shore power enabled berth that will utilize the shore power system;
         2. estimated annual hoteling hours using shore power system;
         3. fuel type and average sulfur content of fuel used in the auxiliary engines for each vessel;
         4. auxiliary engine and boiler information for each vessel; and
         5. estimated annual hoteling load requirements (MW-hours).
      4. any documented commitment of visits and hours by the fleet of vessels that has, or will have, the ability to use the shore-side connection system; and
      5. estimated emission reductions based on the methodology in Appendix C of the following EPA document: [https://www.epa.gov/sites/production/files/2016-02/documents/rfp-epa-oar-](https://www.epa.gov/sites/production/files/2016-02/documents/rfp-epa-oar-otaq-16-02_update.pdf)  [otaq-16-02\_update.pdf.](https://www.epa.gov/sites/production/files/2016-02/documents/rfp-epa-oar-otaq-16-02_update.pdf)
4. Verified Idle Reduction Technologies on School Buses: Idle reduction technologies for school buses can save fuel and money, reduce pollution, and protect children from harmful pollutants contained in diesel exhaust. School buses with MY 2006 or older engines that have been previously retrofitted with a verified emission control device are eligible for funding.
5. All Other Verified Idle Reduction Technologies: DEP will fund idle reduction technologies ONLY if the technology is combined on the same vehicle with a new eligible verified exhaust control funded under this project solicitation, as described in Section III.E.1, except for locomotive idle reduction technologies, shore connection systems, truck stop electrification technologies, or previously retrofitted school buses, as discussed above.
   1. **Verified Aerodynamic Technologies and Verified Low Rolling Resistance Tires:** To improve fuel efficiency, long haul Class 8 trucks can be retrofitted with aerodynamic trailer fairings, or the fairings can be provided as new equipment options. Certain tire models can provide a reduction in NOX emissions and fuel savings, relative to the “standard” new tires for long haul Class 8 trucks, when used on all axles. DEP will fund verified aerodynamic technologies or verified low rolling resistance tires installed on long haul Class 8 trucks ONLY if combined on the same vehicle with the new installation of one or more of the verified exhaust controls funded under this project solicitation, as described in Section III.E.1.

The types of aerodynamic technologies and low rolling resistance tires proposed for funding under this category must exist on EPA’s SmartWay Verified Technologies list for the vehicle/engine application specified in the proposal at the time of proposal submission to EPA. If selected for funding, the actual technologies/tires used by the grant recipient must be specifically named on EPA’s SmartWay Verified Technologies

list at the time of acquisition, and used only for the vehicle/engine applications specified on the list, in order to be eligible for funding.

A list of eligible, EPA-verified aerodynamic technologies is available at: <https://www.epa.gov/verified-diesel-tech/smartway-verified-list-aerodynamic-devices>, and includes:

* + 1. gap fairings that reduce the gap between the tractor and the trailer to reduce turbulence;
    2. trailer side skirts that minimize wind under the trailer; and
    3. trailer rear fairings that reduce turbulence and pressure drop at the rear of the trailer.

A list of EPA-verified low rolling resistance tires is available at: [https://www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-](https://www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-lrr-new-and-retread-tire)  [lrr-new-and-retread-tire,](https://www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-lrr-new-and-retread-tire) and includes both dual tires and single wide tires (single wide tires replace the double tire on each end of a drive or trailer axle, in effect turning an "18" wheeler into a "10" wheeler). Low rolling resistance tires can be used with lower-weight aluminum wheels to further improve fuel savings; however, aluminum wheels are not eligible for funding under this project solicitation unless combined with low rolling resistance tires.

* 1. **Certified Engine Repowers:** Repower refers to replacing an existing engine with a newer, cleaner engine or power source that is certified by EPA or CARB to meet a more stringent set of engine emission standards. Repower includes, but is not limited to, diesel engine replacement with an engine certified for use with diesel or a clean alternative fuel, diesel engine replacement with an electric power source (grid, battery or fuel cell), the replacement of a nonroad engine with a highway engine, and/or the replacement of a diesel engine with an electric generator(s) (genset). Hydrogen fuel cells are only eligible for repowers for eligible urban transit buses and eligible drayage trucks, as defined in this project solicitation. Proposals for repowers should include the pre- and post-project standard emission levels of the engines to be repowered, in order to ensure that the repower will result in a net emissions reduction. All-electric (i.e. zero emission) repowers do not require EPA or CARB certification.

Nonroad engine emission standards, including locomotives and marine engines, are on EPA’s website at: [https://www.epa.gov/emission-standards-reference-guide/nonroad-](https://www.epa.gov/emission-standards-reference-guide/nonroad-engines-and-vehicles-emission-standards)  [engines-and-vehicles-emission-standards](https://www.epa.gov/emission-standards-reference-guide/nonroad-engines-and-vehicles-emission-standards).

Highway engine emission standards are on EPA’s website at: [https://www.epa.gov/emission-standards-reference-guide/heavy-duty-highway-engines-](https://www.epa.gov/emission-standards-reference-guide/heavy-duty-highway-engines-and-vehicles-emission-standards)  [and-vehicles-emission-standards.](https://www.epa.gov/emission-standards-reference-guide/heavy-duty-highway-engines-and-vehicles-emission-standards)

Engines certified to CARB’s Optional Low NOx Standard may be found by searching CARB’s Executive Orders for Heavy-duty Engines and Vehicles, found at: [www.arb.ca.gov/msprog/onroad/cert/cert.php.](http://www.arb.ca.gov/msprog/onroad/cert/cert.php)

Repower of an existing diesel transportation refrigeration unit (TRU) consists of replacing the existing diesel engine in the TRU, but the existing compressor/cooling unit will not be replaced. Repower of an existing diesel-electric genset consists of replacing the existing diesel engine in the genset, but the existing electric generator component will not be replaced.

* + 1. Repower Criteria: Repower projects are eligible for funding on the condition that the following criteria are satisfied:
       1. The repowered vehicle, engine or equipment must continue to perform the same function as before the repower.
       2. The repowered engine must be of similar horsepower as the original engine.
          1. Nonroad: Horsepower increases of more than 25 percent will require specific approval by DEP prior to purchase, and the applicant may be required to pay the additional costs associated with the higher horsepower equipment.
          2. Highway: The engine’s primary intended service class must match the vehicle’s weight class (i.e. an LHD diesel engine is used in a vehicle with GVWR 16,001 – 19,500 pounds, an MHD diesel engine is used in a vehicle with a GVWR of 19,501 – 33,000 pounds, and an HHD diesel engine is used in a vehicle with a GVWR greater than 33,000 pounds). Exceptions may be granted for vocational purposes; however, the GVWR must stay within 10 percent of the engine’s intended service class, and any exceptions will require specific DEP approval prior to purchase.
    2. Repower Scrappage: The purchase of new engines to expand a fleet is not covered by this grant program.
       1. The original engine must be scrapped or rendered permanently disabled within 90 days of being repowered.
          1. If a Tier 3 nonroad vehicle/equipment is repowered, the Tier 3 engine may be retained or sold if the Tier 3 engine will replace a Tier 2 or lower nonroad engine in similar vehicle/equipment, and the Tier 2 or lower nonroad engine will be scrapped. The scrapped engine must currently be in service, operate more than 500 hours per year, and have a similar usage profile as the repowered engine. It is preferred that the scrapped engine currently operates within the same project location(s) as the repowered vehicle/equipment; however, alternative scenarios will be considered. The term “project location” as used in this project solicitation refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized. All equipment must operate within Pennsylvania. Under this scenario, a detailed scrappage plan must be submitted and will require prior DEP approval.
       2. Cutting a three-inch by three-inch hole in the engine block is the preferred scrapping method. Other methods may be considered and will require prior DEP approval.
       3. Evidence of appropriate disposal is required as part of the final report submitted to DEP and must include a certificate of destruction and digital photos of the engine tag (showing serial number, engine family number, and engine model year) and the destroyed engine block.
       4. If scrapped or salvaged engines are to be sold, program income requirements may apply. See Section IV.E. on program income requirements.
    3. Early Attrition: Repowers that would have occurred through normal attrition are considered to be the result of normal fleet turnover and are not eligible for funding under this program.
  1. **Vehicle and Equipment Replacements:** Nonroad and highway diesel vehicles, engines, and equipment can be replaced under this grant program with newer, cleaner vehicles, engines and equipment that operate on diesel or alternative fuels and use engines certified by EPA or CARB to meet a more stringent set of engine emission standards. Replacement projects can include the replacement of diesel vehicles, engines, or equipment with newer, cleaner diesel, electric (grid, battery or fuel cell), hybrid or alternative fuel vehicles, engines, or equipment. All-electric vehicles, engines, and equipment do not require EPA or CARB certification.

Replacement of an existing diesel TRU consists of replacing the entire existing TRU, including the diesel engine and the compressor/cooling unit, with a newer, cleaner TRU. Replacement of an existing diesel-electric genset consists of replacing the entire existing genset with a new genset, including the existing diesel engine and the existing electric generator component. Marine vessels are not eligible for full replacement.

The following are eligible replacement projects:

* + 1. Locomotives and Nonroad Diesel Vehicles and Equipment: Nonroad diesel vehicles or equipment and locomotives can be replaced by newer, cleaner vehicle or piece of equipment powered by a MY 2015 or newer engine certified to EPA emission standards. All-electric replacements are allowed.
       1. Nonroad and locomotive engine emission standards are on EPA’s website at: [https://www.epa.gov/emission-standards-reference-guide/nonroad-engines-and-](https://www.epa.gov/emission-standards-reference-guide/nonroad-engines-and-vehicles-emission-standards)  [vehicles-emission-standards.](https://www.epa.gov/emission-standards-reference-guide/nonroad-engines-and-vehicles-emission-standards)
    2. Highway Diesel Vehicles (other than drayage vehicles): Diesel-powered highway vehicles can be replaced with a newer, cleaner medium-duty or heavy-duty vehicle, powered by a MY 2015 or newer engine certified to EPA emission standards. All- electric replacements are allowed.
       1. Highway engine emission standards are on EPA’s website at: <https://www3.epa.gov/otaq/hd-hwy.htm>.
    3. Replacements for Drayage Vehicles: Drayage vehicles can be replaced if the following conditions are met:
       1. The replacement vehicle is defined as a drayage truck (see Section VI for definitions).
       2. The replacement vehicle has a MY 2011 or newer engine certified by EPA.
       3. If a proposal for the replacement of drayage trucks is selected for funding, the grant recipient will be required to establish guidelines to ensure that any existing truck replaced with grant funds has a history of operating on a frequent basis over the prior year as a drayage truck, and to ensure any new truck purchased with grant funds is operated in a manner consistent with the definition of a drayage truck, as defined in Section VI. For an example of sample guidelines, see

[www.epa.gov/sites/production/files/2016-02/documents/fy16-drayage-truck-](http://www.epa.gov/sites/production/files/2016-02/documents/fy16-drayage-truck-sample-guideline.pdf)  [sample-guideline.pdf.](http://www.epa.gov/sites/production/files/2016-02/documents/fy16-drayage-truck-sample-guideline.pdf)

* + 1. Replacement Criteria: Replacement projects are eligible for funding on the condition that the following criteria are satisfied:
       1. The replacement vehicle, engine, or equipment must perform the same function as the vehicle, engine, or equipment that is being replaced (e.g., an excavator used to dig pipelines would be replaced by an excavator that continues to dig pipelines).
       2. The replacement vehicle, engine, or equipment must be of the same type and similar gross vehicle weight rating or horsepower as the vehicle, engine, or equipment being replaced.
          1. Nonroad: Horsepower increases of more than 25 percent will require specific approval by DEP prior to purchase, and the applicant may be required to pay the additional costs associated with the higher horsepower equipment.
          2. Highway: The replacement vehicle must not be in a larger weight class than the existing vehicle (Class 5, 6, 7, or 8). The engine’s primary intended service class must match the replacement vehicle’s weight class (i.e. an LHD diesel engine is used in a vehicle with GVWR 16,001 – 19,500 pounds, an MHD diesel engine is used in a vehicle with a GVWR of 19,501 – 33,000 pounds, and an HHD diesel engine is used in a vehicle with a GVWR greater than 33,000 pounds). Exceptions may be granted for vocational purposes; the GVWR must stay within 10 percent of the engine’s intended service class and any exceptions will require specific DEP approval prior to purchase.
    2. Replacement Scrappage: The purchase of new vehicles or equipment to expand a fleet is not eligible for funding under this grant program.
       1. The vehicle, engine, or equipment being replaced must be scrapped or rendered permanently disabled within 90 days of being replaced.
          1. If a Tier 3 nonroad vehicle, engine, or equipment is replaced, the Tier 3 vehicle, engine, or equipment may be retained or sold if the Tier 3 vehicle, engine, or equipment will replace a similar Tier 2 or lower vehicle, engine, or equipment, and the Tier 2 or lower nonroad vehicle, engine, or equipment will be scrapped. The scrapped vehicle, engine, or equipment must currently be in service, operate more than 500 hours per year, and have a similar usage profile as the replaced vehicle, engine, or equipment. It is preferred that the scrapped vehicle, engine, or equipment currently operates within the same project location(s) as the replaced vehicle, engine, or equipment; alternative scenarios will be considered. The term “project location” as used in this project solicitation refers to the primary area where the affected vehicles, engines, or equipment operate, or the primary area where the emissions benefits of the project will be realized. All vehicles, engines, or equipment funded by this grant must operate within Pennsylvania. Under this scenario, a detailed scrappage plan must be submitted and will require prior DEP approval.
       2. Disabling the chassis by cutting the vehicle’s frame rails completely in half and cutting a three-inch by three-inch hole in the engine block is the preferred scrapping method. Other methods may be considered and will require prior DEP approval.
       3. Evidence of appropriate disposal is required in the final report submitted to DEP and includes a certificate of destruction and digital photos of the engine tag (showing serial number, engine family number, and engine model year), the destroyed engine block, and cut frame rails or other cut structural components as applicable.
       4. Equipment and vehicle components that are not part of the engine or chassis may be salvaged from the unit being replaced (e.g. plow blades, shovels, seats, tires, etc.). If scrapped or salvaged vehicles/parts are to be sold, program income requirements apply. See Section IV.E.
    3. Early Attrition: Replacements that would have occurred through normal attrition are considered to be the result of normal fleet turnover and are not eligible for funding under this grant program.
  1. **Clean Alternative Fuel Conversions:** Conventional, original equipment manufacturer (OEM) highway diesel vehicles and engines that are altered to operate on alternative fuels such as propane, natural gas, alcohol, or electricity are classified as aftermarket clean alternative fuel conversions. Clean alternative fuel conversions are accomplished by applying a certified or compliant alternative fuel conversion “kit” to an existing highway diesel engine. Proposals for clean alternative fuel conversions should include a discussion of the availability of conversion systems and indicate the pre- and post-project emission standard levels of the engines in order to demonstrate that the conversion will result in an emissions benefit.

All clean alternative fuel conversions (except pure battery electric) must meet applicable EPA standards pursuant to 40 CFR Parts 85 and 86. Lists of certified and compliant clean alternative fuel conversion systems, and additional guidance, can be found at [www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm](http://www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm).

Clean alternative fuel conversions must be “dedicated” or “mixed fuel,” meaning the engine runs only on the alternative fuel, or uses a small amount of diesel mixed with the alternative fuel. Dedicated or mixed fuel engines do not have the ability to operate solely on diesel fuel. “Dual fuel” or “bi-fuel” conversions, meaning the engine can switch between fuel sources and still has the capability of running on 100% diesel, are not eligible for funding. Please note that repowers and replacements with alternative fuel vehicles, engines, or equipment are also allowed, as long as the conditions in Sections

III.E.5. and III.E.6. are met.

The PA Heavy-Duty Diesel Emissions Control Program (25 *Pa. Code* §§ 126.501-531) applies to new heavy-duty diesel-powered engines and vehicles, and requires these new vehicles and engines to be certified by CARB. A new heavy-duty diesel vehicle with less than 7,500 miles on the odometer, and a gross vehicle weight rating (GVWR) of greater than 14,000 pounds, is subject to the program. Additionally, heavy-duty diesel engines that are received from a manufacturer for sale and have not been installed previously on a vehicle are considered new engines subject to the program. At this time, only CARB- certified alternative fuel conversions, repowers or replacements are allowed for new, heavy-duty diesel vehicles and engines. Once a vehicle or engine is no longer considered

new, EPA-certified or verified alternative fuel repowers and replacements are allowed. Medium-duty diesel powered vehicle alternative fuel conversions, repowers or replacements may be either EPA- or CARB-certified or verified.

1. Ineligible Project Types
   1. The following are examples of projects that are not eligible for funding:
      1. Projects already completed or started prior to submitting an application to DEP.
      2. Projects physically located entirely outside of Pennsylvania.
      3. Projects that are intended for fleet expansion.
      4. The repair or salvaging of a disabled vehicle, or scheduled or routine maintenance and repairs due to accidents or neglect.
      5. Projects that were previously funded by a different state or federally funded grant program.
      6. Projects that replace or repower an alternative fuel vehicle, engine or equipment to operate on another alternative fuel.
      7. Projects with no measurable environmental net benefit for the Commonwealth.
      8. Repowers or replacements that would have occurred through normal attrition.
         1. Normal attrition is generally defined as a replacement or repower that is scheduled to take place within 3 years of the project start date. Normal attrition is typically defined by the vehicle or fleet owner’s budget plan, operating plan, standard procedures, or retirement schedule.
         2. Example: If a school bus fleet typically retires vehicles after 20 years, a bus that is currently in its 18th or 19th year of service is not eligible for replacement. A bus that is currently in its 17th year of service and has three years of useful life remaining (as defined by the fleet’s retirement schedule) is eligible for replacement or repower.
         3. Normal attrition does not include repowers or replacements that must occur due to a federal, state, or local mandate.
2. Funding Restrictions

No funds awarded under the PA State Clean Diesel Grant Program can be used:

* 1. to fund the costs of emission reductions that are mandated under federal law, pursuant to 42 U.S.C. 16132(d)(2), or any other federal, state or local mandates. The restriction applies when the mandate takes effect (the effective date) for any affected vehicles, engines or equipment. This restriction does not apply to a mandate in a State Implementation Plan approved by the EPA Administrator under the Clean Air Act. Voluntary or elective emission reduction measures shall not be considered “mandated,” regardless of whether the reductions are included in the State Implementation Plan.
     1. Projects involving locomotives and marine engines will not be considered for funding under this project solicitation if the upgrade/remanufacture proposed for funding is required by EPA’s locomotive and marine rule, “Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder.” Also, projects involving stationary engines will not be considered for funding under this project solicitation if the emission reductions proposed for funding are required by EPA’s RICE rule, “National Emission Standards

for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ).”

* + 1. Projects involving locomotive, marine, and stationary engines will be evaluated on a case-by-case basis to determine if the proposed project is required by one of the rules cited in Section III.G.1.a. above, based on the information submitted pursuant to Section III.G.1.c. below.
    2. Proposals which include locomotives and/or marine engines and/or stationary engines must include a clear and concise justification for why/how the proposed emission reduction are not subject to the Restriction for Mandated Measures under this project solicitation. The justification must clearly demonstrate that:
       1. the target engines are exempt from any federal requirements; or
       2. emission reductions funded under the PA State Clean Diesel Grant Program will be implemented prior to the effective date of any applicable federal requirements; and/or
       3. emission reductions funded under the PA State Clean Diesel Grant will not be used to satisfy any applicable federal requirements, but instead are in excess of (above and beyond) those required by the applicable mandate.
    3. Provisions of a state or federal consent decree or other litigation resolution are not considered to be federal mandates for the purpose of this project solicitation.
  1. as matching funds for other federal grants, lobbying, or intervention in local, state, or federal regulatory or adjudicatory proceedings, and cannot be used to sue the Commonwealth of Pennsylvania or any other government entity.
  2. to cover expenses incurred prior to the project period set forth in any grant agreement funded by the PA State Clean Diesel Grant Program. Additionally, expenses incurred prior to the project period set forth in any grant agreement resulting from this project solicitation are not eligible as a cost-share for proposed projects.
  3. for purchase of formerly verified technologies:
     1. EPA – Retrofit, Repower, Replace - [https://www.epa.gov/verified-diesel-tech/list-](https://www.epa.gov/verified-diesel-tech/list-formerly-verified-technologies-clean-diesel)  [formerly-verified-technologies-clean-diesel.](https://www.epa.gov/verified-diesel-tech/list-formerly-verified-technologies-clean-diesel)
     2. EPA – SmartWay Technologies - [https://www.epa.gov/verified-diesel-tech/formerly-](https://www.epa.gov/verified-diesel-tech/formerly-smartway-verified-list-aerodynamic-devices)  [smartway-verified-list-aerodynamic-devices](https://www.epa.gov/verified-diesel-tech/formerly-smartway-verified-list-aerodynamic-devices).
     3. EPA – Delisted Emerging Technologies - <http://www.epa.gov/cleandiesel/verification/emerg-list.htm>.
     4. CARB Level 1 - [www.arb.ca.gov/diesel/verdev/vt/fv1.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv1.htm).
     5. CARB Level 2 - [www.arb.ca.gov/diesel/verdev/vt/fv2.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv2.htm).
     6. CARB Level 3 - [www.arb.ca.gov/diesel/verdev/vt/fv3.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv3.htm).
  4. for emissions testing and/or air monitoring activities (including the acquisition cost of emissions testing equipment), or research and development.
  5. for the purchase or installation of fueling infrastructure, such as that used for the production and/or distribution of biodiesel, compressed natural gas, liquefied natural gas, and or other fuels. The electric infrastructure referred to in the Section IV relating to cost share requirements only includes the ‘on-vehicle’ technology required to enable the vehicle, engine, or equipment to utilize the electric power source.
  6. to purchase advanced aerodynamic technologies or low rolling resistance tires, unless:
     1. the technology is combined on the same vehicle with the new installation of one or more of the verified exhaust controls funded under this project solicitation, as described in Section III.E.1., or
     2. a fleet is retrofitting from standard dual tires to SmartWay-verified single-wide low rolling resistance tires.
  7. to purchase exhaust controls, low rolling resistance tires or advanced aerodynamic technologies if similar technologies have previously been installed on the truck or trailer.
  8. to purchase APUs or generators for vehicles with 2007 or newer certified engine configurations on long haul Class 8 vehicles.
  9. to retrofit, repower, convert or replace a school bus with engine MY 1990 or older, or replace school buses with engine MY 2004-2006 other than with an all-electric vehicle, or retrofit, replace, repower or convert school buses with engine MY 2007 or newer. Refer to Table 1 for further explanation.
  10. to retrofit, repower, convert or replace a transit bus, medium-duty, or heavy-duty highway vehicle with engine MY 1990 older, or to retrofit engine MY 2007 or newer with DOCs or DPFs, or retrofit engine MY 2010 or newer with SCR, or replace engine MY 2004-2006 with other than with an all-electric vehicle, or replace, repower or convert engine MY 2007 or newer. Refer to Table 2 for further explanation.
  11. to repower, replace or upgrade Tier 3 or Tier 4 marine engines, or to repower or replace marine engines from Tier 1 marine engine standard to Tier 1 marine engine standard, or from a Tier 2 marine engine standard to a Tier 2 or lower marine engine standard. Refer to Table 3 for further explanation.
  12. to fund marine shore connection system projects that are expected to be utilized less than 2,000 MW-hr/year.
  13. to retrofit, repower, replace, upgrade or install idle reduction technologies on eligible locomotives or marine engines that operate less than 1,000 hours per year.
  14. to retrofit unregulated or Tier 0 locomotives with SCR, or to upgrade, repower or replace locomotives from: Tier 0+/1 to Tier 0+ or lower; Tier 1+/2 to Tier 1+ or lower; Tier 2 to Tier 1+ or lower; or, from Tier 2+ to Tier 2+ or lower. See Table 4 for eligible project types.
  15. to upgrade, repower or replace line-haul locomotives from Tier 2 to Tier 4, or to upgrade, repower or replace line-haul locomotives from Tier 2+ to Tiers 3 and 4. See Table 4 for eligible project types.
  16. to install Automatic Engine Start-Stop technologies on locomotives currently certified to Tier 0+ or higher. See Table 4 for eligible project types.
  17. to fund locomotive shore connection system projects that are expected to be utilized less than 1,000 hours/year.
  18. to repower or replace nonroad Tier 0 (unregulated) engines to a nonroad Tier 1 or lower nonroad engine standard or from a Tier 2 nonroad engine standard to a Tier 3 or lower nonroad engine standard. Refer to Table 5 for further explanation.
  19. to retrofit, repower, upgrade or replace a nonroad engine or equipment that has less than seven years of useful life remaining. A table distinguishing which nonroad engine model years EPA has determined to have at least seven years of useful life remaining, based on the type and age of vehicle, can be found at [www.epa.gov/sites/production/files/2015-](http://www.epa.gov/sites/production/files/2015-10/documents/fy14-nonroad-remaining-useful-life.pdf)  [10/documents/fy14-nonroad-remaining-useful-life.pdf](http://www.epa.gov/sites/production/files/2015-10/documents/fy14-nonroad-remaining-useful-life.pdf).
  20. to retrofit, repower, replace or upgrade nonroad engines and equipment that operate less than 500 hours per year.
  21. for replacements and repowers that would have occurred through normal attrition. See Section III.F.1.h.
  22. for the purchase of vehicles, engines, or equipment to expand a fleet.
  23. to prepare the PA State Clean Diesel Grant Program grant application.
  24. for land acquisition.
  25. for vehicle title, registration and inspection fees, permit fees, or any other fees not approved by DEP in writing.
  26. for ground service and landscaping.
  27. for business start-up costs and advertising.
  28. for indirect costs (i.e., general administrative and overhead, contingency funds, etc.).
  29. for travel, lodging and subsistence costs.
  30. for conference or meeting expenses including catering, conference equipment and room rental and any other cost not deemed acceptable by DEP in writing.

## Cost Share and Program Income Requirements

The following section identifies the mandatory cost-share requirements, specifically the project costs DEP will reimburse and the project costs that are the responsibility of the applicant. This section also discusses voluntary cost-share options and program income requirements.

1. Mandatory Cost-Share Requirement

The following are the funding limitations and mandatory cost-share requirements for eligible projects, as defined in Sections III.E. of this project solicitation:

* 1. Exhaust Controls: DEP will fund up to 100% of the cost (labor and equipment) for an eligible verified exhaust emission control retrofit.
  2. Engine Upgrades: DEP will fund up to 40% of the cost (labor and equipment) of an eligible nonroad, locomotive or marine engine upgrade, which include a verified retrofit or a certified remanufacture system. Applicants are responsible for cost-sharing at least 60% of the cost of an eligible engine upgrade.
  3. Idle Reduction Technologies on Locomotives: DEP will fund up to 40% of the cost (labor and equipment) of an eligible verified idle reduction technology on a locomotive. Applicants are responsible for cost-sharing at least 60% of the cost of an eligible idle reduction technology on a locomotive.
  4. Shore Connection Systems and Truck Stop Electrification Technologies: DEP will fund up to 25% of the cost (labor and equipment) of an eligible shore connection system or truck stop electrification technology. Applicants are responsible for cost-sharing at least 75% of the cost of an eligible shore connection system or truck stop electrification technology.
     1. Eligible TSE/EPS costs include, but are not limited to, the purchase and installation of electrical infrastructure or equipment to enable heating, cooling, and the use of cab power for parked trucks, or to enable the use of power for transport refrigeration units (TRUs) and auxiliary power systems at distribution centers, intermodal facilities, and other places where trucks congregate.
     2. Ineligible costs for TSE/EPS include, but are not limited to: on-board auxiliary power units and other equipment installed on trucks; equipment and services unrelated to heating and cooling (e.g., telephone, internet, television, etc.); TRUs; electricity costs; and operation and maintenance costs.
     3. Eligible marine shore power connection costs include, but are not limited to various components such as cables, cable management systems, shore power coupler systems, distribution control systems, transformers, grounding switches, service breakers, capacitor banks, and power distribution.
     4. Ineligible costs for marine shore power connection systems include, but are not limited to, shipside modifications to accept shore-based electrical power, electricity costs, and operation and maintenance costs.
  5. Idle Reduction Technologies on School Buses: DEP will fund up to 100% of the cost (labor and equipment) of verified idle reduction technologies on school buses with MY 2006 or older engines that have been previously retrofitted with a verified emission control device.
  6. All Other Idle Reduction Technologies: DEP will fund up to 100% of the cost (labor and equipment) for all other verified idle reduction technologies, only if the technology is combined on the same vehicle with a new eligible verified exhaust control funded under this project solicitation, as described in Section III.E.3.
  7. Verified Aerodynamic Technologies and Verified Low Rolling Resistance Tires: DEP will fund up to 100% of the cost (labor and equipment) for verified aerodynamic technologies or verified low rolling resistance tires installed on long haul Class 8 trucks, ONLY if combined on the same vehicle with the new installation of one or more of the Verified Exhaust Controls funded under this project solicitation, as described in Section III.E.4.
  8. Certified Engine Repower: DEP will fund up to 40% of the cost (labor and equipment) of an eligible engine repower with a MY 2015 or newer engine certified to EPA emission standards. Applicants are responsible for cost-sharing at least 60% of the cost.
     1. The eligible cost of engine repower for nonroad or highway vehicles includes the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional, including related labor expenses. Charges for equipment and parts on engine repower projects are only eligible for funding if they are included in the certified engine configuration and/or are required to ensure the effective installation and functioning of the new technology, but are not part of typical vehicle or equipment maintenance or repair. For battery, fuel cell, and grid electric powered vehicle and equipment repowers, examples of eligible repower costs include, but are not limited to: electric motors, electric inverters, battery assembly, direct drive transmission/gearbox, regenerative braking system, vehicle control/central processing unit, vehicle instrument cluster, hydrogen storage tank, hydrogen management system, fuel cell stack assembly, and the purchase and installation of electrical infrastructure or equipment to enable the use of power.
     2. Examples of ineligible engine repower costs for nonroad and highway vehicles include, but are not limited to: tires, cabs, axles, paint, brakes, and mufflers. Examples of ineligible costs for battery, fuel cell, and grid electric powered

vehicle and equipment repowers include, but are not limited to, electricity, and operation and maintenance costs.

* 1. Certified Vehicle/Equipment Replacement:
     1. Locomotive and Nonroad Diesel Vehicles and Equipment: DEP will fund up to 25% of the cost of an eligible replacement vehicle or piece of equipment powered by a MY 2013 or newer engine certified to EPA emission standards. Applicants are responsible for cost-sharing at least 75% of the cost.
     2. Highway Diesel Vehicles: DEP will fund up to 25% of the cost of an eligible vehicle powered by a MY 2013 or newer engine certified to EPA emission standards. Applicants are responsible for cost-sharing at least 75% of the cost.
     3. Drayage Vehicle Replacement: DEP will fund up to 50% of the cost of an eligible replacement drayage truck powered by a MY 2010 or newer certified engine. Applicants are responsible for cost-sharing at least 50% of the cost.
     4. The eligible cost of a replacement includes the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. The cost of additional “optional” components or “add-ons” that significantly increase the cost of the vehicle may not be eligible for funding under the grant; the replacement vehicle should resemble the replaced vehicle in form and function.
     5. For grid electric powered equipment replacements, examples of eligible replacement costs include, but are not limited to, the purchase and installation of electrical infrastructure or equipment to enable the use of power. Examples of ineligible costs include, but are not limited to, electricity, and operation and maintenance costs.
  2. Clean Alternative Fuel Conversions: DEP will fund up to 40% of the cost (labor and equipment) of an eligible certified or compliant clean alternative fuel conversion.

1. Voluntary Cost-Share
   1. Voluntary cost share is a form of leveraging. Leveraging is generally when an applicant proposes to provide its own additional funds/resources or those from third party sources to support or complement the project they are awarded under the competition which are above and beyond the DEP grant funds awarded.
   2. While it is not required that an applicant provide a voluntary cost-share (or overmatch if a mandatory cost share applies) beyond DEP’s funding and/or any mandatory cost-share as described above, applicants may provide a voluntary cost-share or overmatch to improve the environmental outputs and outcomes of the project.
   3. If proposed, the voluntary cost-share or overmatch funds must be indicated in the budget section of the application. If DEP accepts an offer for a voluntary cost-share or overmatch, applicants must meet this funding commitment as a legal condition of receiving DEP funding. The recipient is legally obligated to meet any proposed voluntary cost-share or overmatch that is included in the approved project budget because the grant agreement includes the voluntary cost-share or overmatch. If it does not materialize during grant performance, then DEP may reconsider the legitimacy of the award and/or take other appropriate action compliant with the terms of the grant agreement.
2. Program Income

Program income, as defined at 2 CFR §200.80, means gross income received by the grantee or sub-recipient that is directly generated by a grant supported activity or earned as a result of the grant award during the period of performance. Under the PA State Clean Diesel Grants, program income is generally limited to the sale of scrapped or remanufactured engines/chassis or salvaged engine/vehicle/equipment components and does not include revenue generated by recipients or sub-recipients through the commercial use of vehicles and equipment purchased with grant funds. “Period of performance” is the time between the start and end dates of the period of performance as included in the grant award. Program income earned during the project period shall be retained by the recipient and, in accordance with 2 CFR §200.307, recipient is authorized to use program income as follows:

* 1. Program income may be added to the grant award by DEP and recipient and used to further eligible project or program objectives. The program income shall be used for the purposes and under the conditions of the grant agreement.
  2. Program income may be used to meet the cost-sharing or matching requirement of the grant award, including any mandatory or voluntary cost-share. The amount of the grant award remains the same.
  3. Deducted from the total allowable costs to determine the net allowable costs on which the state share of costs is based. This means that the recipient shall spend program income on project activities before spending/requesting state funds for project activities. This may result in unspent state funds at the end of the project period.
  4. The recipient will maintain records adequate to document the extent to which transactions generate program income and the disposition of program income.

## General Conditions, Reporting, and Project Monitoring

1. Public Disclosure of Application Documents

PA State Clean Diesel Grant Program proposals are public documents and subject to disclosure to the public upon request. Any information included in the application package that the applicant wishes the Commonwealth to consider as proprietary must be on a separate sheet of paper and must be clearly marked as proprietary. As required under Section 13.2 of the Pennsylvania Air Pollution Control Act, 35 P.S. Section 4013.2, cause must be shown as to why the information should be considered confidential.

1. Additional Conditions

The awarding of grant funding is subject to the following conditions:

* 1. DEP may consider past performance of applicants who have received state funded grants when determining grant eligibility. DEP reserves the right to not award or withhold funds to applicants that have not completed projects or have failed to adhere to grant agreement requirements, including interim and final reporting requirements, for projects funded by the PA State Clean Diesel Grant Program or other state grant programs. This determination will be made by DEP on a case-by-case basis.
  2. All projects must be in compliance with all applicable local, state, and federal laws and must adhere to DEP guidance and policies.
  3. Applicants must not have any outstanding obligations (financial or otherwise) to the Commonwealth and must not have any unresolved environmental violations.
  4. Grantees must secure all permits or approvals otherwise required for the project to proceed, including permits required by DEP.
  5. All projects must be consistent with the applicable provisions of the Keystone Principles for Growth, Investment and Resource Conservation; a description of the Keystone Principles is available at: [www.phmc.state.pa.us/bhp/pkp.pdf](http://www.phmc.state.pa.us/bhp/pkp.pdf).

1. Reporting Requirements
   1. Quarterly Reports: Quarterly reports will be submitted to DEP within 14 days after the end of each quarter during the project period. Reporting quarters end March 31, June 30, September 30, and December 31. Quarterly reports can be submitted through standard mail or through electronic mail sent to the DEP Program Administrator. Detailed reporting requirements will be established in the grant agreement.
   2. Final Report: A final report will be submitted to DEP upon completion of the project, no later than 45 days after the Project Completion Date established by the grant agreement or future amendments. Detailed requirements for the final report will be established in the grant agreement.
   3. 1-Year Follow-Up Report: A 1-year follow-up report will be submitted to DEP, at the earliest, one year after the Project Completion Date, but no later than one year and 45 days after the Project Completion Date. Detailed requirements for the 1-year follow-up report will be established in the grant agreement.
2. Financial Monitoring
   1. Grantees must properly manage and account for funding received under the PA State Clean Diesel Grant Program and any matching funds provided by the applicant and any program income generated as a result of the project. Appropriate records must be maintained in order to confirm compliance with the conditions of the grant agreement.
   2. No credit will be given for funds spent prior to the period of performance, unless otherwise approved in writing. All funding must be spent in accordance with the spending plan included in the grant agreement.
   3. Extensions of the grant period of performance will not be issued, unless DEP concludes it to be necessary by determination or request.
   4. Projects may be subject to PA Prevailing Wage Act requirements.
      1. Grantees shall ensure, where necessary, that construction projects with a cost in excess of $25,000 that may be subject to PA’s Prevailing Wage Act requirements are paid appropriate wages commensurate with the Act.
      2. For information about the applicability of the Prevailing Wage Act requirements, applicants should contact the Department of Labor and Industry at (717) 705-7256 or (800) 932-0665 or visit the Web site at [www.dli.state.pa.us.](http://www.dli.state.pa.us/) It is solely the responsibility of the grantee to ensure the act is followed, if applicable.
   5. DEP reserves the right to terminate the project and/or recover funding from grantees not properly managing the funding in accordance with the conditions of the program and the grant agreement.
   6. DEP reserves the right to inspect projects financed with PA State Clean Diesel Grant Program funds and to audit or require a third-party audit of any project’s financial transactions or compliance with agreement terms.
3. Project Status and Monitoring
   1. Grantees will, in quarterly reports, provide DEP with the status of the project work, as compared to the Work Plan included in the grant agreement.
   2. Grantees will be required to provide a status report with each application for reimbursement, as outlined in the grant agreement.
   3. DEP may, at any time during the project period, request an update on the status of the project, to ensure that the project activities are being completed according to the project Work Plan included in the grant agreement.
   4. Project Completion
      1. The project must be completed in accordance with the specifics of the grant agreement. Modifications will not be considered, except for very limited scope and budget changes, including, but not limited to: replacements of equal quality and function, and reallocation of contract budget category dollar amounts to and from other budget categories, as long as the maximum contract dollar amount payable by DEP to the recipient is not exceeded. All changes must be approved by DEP.
      2. Grantees must adhere to scrappage requirements, when applicable. Scrappage requirements will be detailed in the grant agreement.
      3. The project will not be considered complete until an on-site inspection of the project work is performed by DEP to confirm the project work is complete. DEP will send written notification to the grantee when it has confirmed that the project work is complete. On-site inspection may occur during the project period if project work is completed early, but must occur no later than 14 days after the Project Completion Date, unless otherwise agreed to in writing by DEP.

## Glossary

*Alternative fuel* - gaseous fuels such as hydrogen, natural gas, and propane; alcohols such as ethanol, methanol, and butanol; vegetable and waste-derived oils; and electricity. Other fuels may be considered for alternative fuel conversions, repower or replacement projects on a case- by-case basis by DEP.

*Bus -* a motor vehicle with motive power (except a trailer) designed to carry more than 10 individuals.

* 1. For the purposes of this application and guidance, the term bus includes school buses of Type A, B, C, and D. Schoolbuses are defined as “a passenger motor vehicle designed to carry a driver and more than 10 passengers, that the Secretary of Transportation decides is likely to be used significantly to transport preprimary, primary, and secondary school students to or from school or an event related to school. (49 U.S.C. 30125)
  2. For the purpose of this application and guidance, the term bus also includes medium- and heavy-duty transit or urban buses. See ‘medium- and heavy-duty highway vehicle’ definition.

*CARB* - California Air Resources Board.

*CFR* - Code of Federal Regulations.

*Closed Crankcase Ventilation System/CCV System* - a system designed to channel the very small amount of the gases that leak by the compression rings on each cylinder during the ignition cycle of the engine (blow-by) from the combustion chambers of an internal combustion engine back into the combustion chamber, in order to thoroughly burn its contaminants which reduce the amount of pollution the engine produces and to utilize power derived by reigniting the fuel that had previously escaped.

*Commonwealth* - Commonwealth of Pennsylvania.

*Diesel fuel* - a fuel that is commonly or commercially known, sold or represented as diesel fuel, including any mixture of primarily liquid hydrocarbons that is sold or represented as suitable for use in an internal combustion, compression-ignition engine.

*Diesel Particulate Filter/DPF* - exhaust after-treatment devices that significantly reduce emissions from diesel fueled vehicles and equipment. DPFs typically use a porous ceramic or cordierite substrate or metallic filter, to physically trap particulate matter (PM) and remove it from the exhaust stream.

*Diesel Oxidation Catalyst/DOC* - exhaust after-treatment devices that reduce emissions from diesel fueled vehicles and equipment. DOCs generally consist of a precious metal coated flow- through honeycomb structure contained in a stainless steel housing. As hot diesel exhaust flows through the honeycomb structure, the precious metal coating causes a catalytic reaction that breaks down pollutants into less harmful components.

*DEP* - Pennsylvania Department of Environmental Protection.

*DERA* - Diesel Emission Reduction Act, a federal program that provides funding to support projects that reduce harmful emissions from diesel engines.

*Drayage Truck* - any Class 8b in-use on-road vehicle with a gross vehicle weight rating (GVWR) of greater than 33,000 pounds operating on or transgressing through port or intermodal rail yard property for the purpose of loading, unloading or transporting cargo, such as containerized, bulk or break-bulk goods.

*Electric vehicle or equipment* - A vehicle or engine that uses electric motors and motor controllers for propulsion or operation of mechanical equipment in place of more common power sources such as the internal combustion engine (ICE).

*Engine upgrade* - the process of removing parts on a certified engine configuration and replacing them with parts that cause the engine to represent an engine configuration which is certified to meet more stringent federal emission standards. Generally, engines are able to be upgraded to a cleaner EPA-certified configuration through the application of a “kit.”

*Exhaust controls* - pollution control devices installed in the exhaust system (such as oxidation catalysts and particulate matter filters), or systems that include crankcase emission control (like a closed crankcase filtration system).

*Grantee* - an applicant that has an executed PA State Clean Diesel Grant Program grant agreement with DEP.

*GVWR* - Gross Vehicle Weight Rating - the value specified by the manufacturer as the loaded weight of a single vehicle.

*Idle reduction technology* - technologies that provide power to the vehicle that would otherwise be provided by idling of the main propulsion engine; this technology includes systems designed for stationary or mobile use.

*Hybrid electric vehicle (HEV)* - a motor vehicle that draws propulsion energy from onboard sources of energy that are both:

1. an internal combustion engine using combustible fuel, and
2. a rechargeable energy storage system.

*Medium- and Heavy-Duty Highway Vehicles* - includes Class 5-8 vehicles, based on GVWR

1. Class 5: 16,001 – 19,500 pounds GVWR
2. Class 6: 19,501 – 26,000 pounds GVWR
3. Class 7: 26,001 – 33,000 pounds GVWR
4. Class 8a: 33,001 – 60,000 pounds GVWR
5. Class 8b: 60,001 pounds GVWR and over

*MY* - Model year

*Non-road engine and equipment* - an internal combustion engine or a gas turbine engine used for other purposes than being an engine of a vehicle operated on public roadways, or equipment utilizing such an engine.

*Ozone -* a pollutant formed by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight.

*PA State Clean Diesel Grant* - monies allocated from the PA State Clean Diesel Grant Program fund for a project approved by DEP.

*PM2.5* - fine particulate matter with particles that have a diameter of 2.5 microns or less and the precursor emissions that contribute to the formation of fine particulate matter.

*Replacement* - early replacement of non-road and highway diesel vehicles and equipment with newer, cleaner vehicles and equipment that operate on diesel or alternative fuels and use engines certified by EPA and, if applicable, CARB, to meet a more stringent set of engine emissions standards.

*Repower(ing)* - removal of an existing engine and replacing it with a newer, cleaner engine that is certified to a more stringent set of engine emission standards.

*Retrofit technology* - technologies that can be installed on existing diesel-powered vehicles that reduce emission levels of one or more pollutants. Retrofit technologies include but are not limited to exhaust controls and engine upgrades.

*Selective Catalytic Reduction/SCR* - an advanced active emissions control technology system that injects a liquid-reductant agent through a special catalyst into the exhaust stream of a diesel engine. The reductant source is usually automotive-grade urea, otherwise known as Diesel Exhaust Fluid (DEF). The chemical reaction is known as "reduction" where the DEF is the reducing agent that reacts with NOX to convert the pollutants into nitrogen, water and tiny amounts of CO2.

## Application Instructions

The instructions on the following pages describe the information required to complete the application. The application form must be typed or printed neatly and all applicable parts completed. The information MUST be complete. Incomplete or inadequate applications will be deemed unacceptable and will not be evaluated for or receive funding. Do not submit separate attachments other than those specifically called for in the instructions. The Commonwealth reserves the right to reject any and all applications received as a result of this request.

## APPLICATION INSTRUCTIONS

**Please be sure to indicate your organization and sign the application. The authorized representative signing this section must be authorized by a board of directors, governing entity, etc., as the legal signatory for the applicant and the person capable of entering into a contract with the Commonwealth. The original signature MUST be dated.**

**The application has been modified to be a ‘fill-in-the-blank’ form. Applicants should click on the gray box and type in the required information. Some questions will have drop-down menus to select one of several options. If the applicant prefers to have a plain text version of the application, which can be printed out and filled in by hand, the applicant should contact the program administrator.**

1. Project Title: Assign your project a descriptive title of 10 or fewer words. Use this title for all correspondence regarding this project.
2. Applicant Information: Enter the applicant organization's legal name, and the applicant’s ‘Doing Business As’ name, if applicable. Include ‘Doing Business As’ documentation in Appendix E, if applicable. The mailing address may include a post office box number in lieu of a physical location.
   1. Federal Taxpayer Identification Number: This number is also called the Federal Employer Identification Number (EIN or FEIN) and is a unique 9-digit number assigned by the Federal Internal Revenue Service (IRS) to business entities operating in the United States for the purpose of identification. If the applicant uses an owner Social Security Number for tax filings, enter “SSN used” here. The applicant does not need to enter the actual Social Security Number. Do NOT leave this entry blank.
   2. DUNS Number: It is necessary to have or to register for a Data Universal Numbering System (DUNS) number in order to receive funding under the PA State Clean Diesel Grant Program. If the applicant does not currently have a DUNS Number, the applicant should apply for a DUNS Number and enter ‘Application Pending’ and the date that the DUNS Number application was submitted on this application form. A DUNS number may be obtained from Dun and Bradstreet, Inc. by telephone (866-705-5711) or online (<http://fedgov.dnb.com/webform>). Do NOT leave this entry blank.
   3. SAP Vendor Number: Enter your SAP (Vendor Identification) Number. Applicants that have not had previous contracts or grant agreements with the Commonwealth will be required to obtain a Vendor Identification Number through the Vendor Data Management Unit, <http://www.vendorregistration.state.pa.us/cvmu/paper/default.aspx>(Non- Procurement Vendor Site Registration Link) and submit a Form W-9, Request for

Taxpayer Identification Number and Certification. If the applicant does not have an SAP (Vendor Identification) Number, the applicant should enter ‘Application Pending’ and the date that the SAP Vendor Number application was submitted on this application form.

Do NOT leave this entry blank.

* 1. Small Business Designation: Clicking yes in this section indicates that the applicant organization is considered a ‘small business’ under PA law.

1. Organization Type: Select the applicant’s type of organization from the drop-down menu list of eligible applicants. If using the plain text application, select the appropriate box.
   1. If “other” is selected either from the drop-down menu or on the plain text application, provide additional information about the organization type.
   2. The applicant should indicate whether or not it is an approved distressed municipality under Act 47, Financially Distressed Municipalities Act of 1987. A list of Act 47 Distress Determinations can be found on the PA Department of Community and Economic Development web site at [www.newpa.com/local-government](http://www.newpa.com/local-government).
2. Project Contact Information: Provide contact information for a person within the organization that will be the primary contact for the project. The project contact person does not have to be the same person as the signatory of the application. The applicant should provide a telephone number, a facsimile number, and an e-mail address for the project contact person.
3. Project Site Information: Provide the complete physical address of the project site, including the NINE-digit zip code (mandatory). The project site address must be a physical street address; a post office box number will not be accepted. Indicate the county and the municipality (township, borough, or city) in which the project is located. If the project is statewide, or will take place in more than one county, check the box provided in this section and list as many counties as possible. For a multi-county project, use the location that will be considered the project base, or the location where the majority of the project work will take place, as the project site address for this part of the application.
4. Total Reimbursement: Indicate the total reimbursement that the applicant intends to request for the entire project. The applicant should ensure that the values in Question 19 of this application add up to the requested total reimbursement amount. Indicate whether the requested amount is for actual or estimated project costs.
5. Project Duration: Identify the project duration. Estimate the start date, end date, and total time in weeks or months. Project must be complete by September 30, 2017. Extensions may be granted by DEP.
6. Project Type: Select the applicable project type. If more than one project type is proposed, select all that apply and provide details in Attachment B: Detailed Project Description and Work Plan with Schedule. See Section III.E. Eligible Projects for details and descriptions of eligible projects. See Section IV. Cost Share for what DEP will reimburse for each project type. If the applicant has any questions about the eligibility of a proposed project, the applicant should contact the program administrator prior to submitting an application.
7. DEP Staff Contact: If the applicant organization contacted any DEP staff regarding this project, please identify the staff member(s) who was contacted.
8. Facility or Infrastructure Project: Some proposed projects will require developing facilities or infrastructure for the project to be successful. For projects that involve developing facilities and infrastructure, state law requires that DEP consider local comprehensive plans and zoning ordinances in funding decisions. Indicate if facilities or infrastructure developments

or improvements are needed for this project. If yes, identify if the proposed project is consistent with county, municipal or multi-municipal comprehensive plans or zoning ordinances for the project location. **Note:** PA State Clean Diesel Grant funds cannot be used for facility or infrastructure projects. The electric infrastructure referred to in Section IV relating to cost share requirements only includes the ‘on-vehicle’ technology required to enable the vehicle, engine, or equipment to utilize the electric power source.

1. Other Funding Sources: Indicate whether the project has been submitted to another source for funding. There are restrictions on using PA State Clean Diesel Grant funds in combination with other funding types, specifically if the other funding source is being used as matching funds for mandatory or voluntary match requirements. See Section IV. Checking “yes” will, not preclude consideration for a PA State Clean Diesel Grant Program, unless the funding source conflicts with the requirements of this grant program.
2. Brownfield or Environmental Justice Location: Identify if the project is located on a Brownfield Redevelopment or Environmental Justice site. This question addresses EPA requirements to show “Benefits to the Community,” described by EPA as how projects “will address the needs and concerns of local communities, including any communities or populations that have faced or are facing environmental justice concerns and/or other interested parties, groups, or populations that are, or have been, affected by the environmental and/or other issues that the project is intended to address.” Communities in Environmental Justice Areas or Brownfields are significantly impacted communities.
   1. Brownfields are former industrial locations that have been environmentally remediated to a standard that allows development of non-industrial businesses. More information about Brownfield Redevelopment and sites designated as Brownfield sites can be found at the following website: [http://www.portal.state.pa.us/portal/server.pt/community/brownfield\_redevelopment/205](http://www.portal.state.pa.us/portal/server.pt/community/brownfield_redevelopment/20540)  [40](http://www.portal.state.pa.us/portal/server.pt/community/brownfield_redevelopment/20540).
   2. An Environmental Justice Area is any census tract where 20 percent or more individuals live in poverty and/or 30 percent or more of the population is minority. These areas tend to receive a disproportionate amount of pollution exposure. More information on Environmental Justice or designated Environmental Justice areas can be found at the following website: [http://www.portal.state.pa.us/portal/server.pt/community/office\_of\_environmental\_advoc](http://www.portal.state.pa.us/portal/server.pt/community/office_of_environmental_advocate/14049)  [ate/14049.](http://www.portal.state.pa.us/portal/server.pt/community/office_of_environmental_advocate/14049) If the applicant organization cannot access this information on the internet, please contact DEP for assistance.
3. Priority Areas:
   1. Identify if the project is located in a priority area. A priority area is an area that meets one or more of the following criteria. The project is located in an area:
      1. in nonattainment or maintenance of national ambient air quality standards for Ozone and/or PM2.5;
      2. with toxic air pollutant concerns as identified from the National Air Toxics Assessment data;
      3. designated as Federal Class I areas; and/or
      4. accepted to participate in EPA’s Ozone Advance or PM Advance Programs.
   2. Priority areas include the following counties: Allegheny, Armstrong, Beaver, Berks, Bucks, Butler, Cambria, Carbon, Chester, Cumberland, Dauphin, Delaware, Fayette,

Greene, Indiana, Lancaster, Lawrence, Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, Washington, Westmoreland, and York.

1. High-Pollution Areas: Identify if the project is located in a High-Pollution Area. The following are considered High-Pollution Areas:
   1. Ports - cities, towns, or other places alongside navigable water with facilities for the loading and unloading of cargo from ships; places from which aircraft operate that have paved runways and passenger and cargo terminals which include baggage-movement and passenger-transit operations; and places where foreign goods are inspected by customs officers and allowed to pass into and out of a country.
   2. Rail yards - places at which trains originate or terminate, or at which they are distributed or combined.
   3. Terminals - freight or passenger stations at the end of carrier lines or that serve as junctions at any point with other lines, which have facilities for the handling of freight and passengers.
   4. Distribution centers - facilities that perform consolidation, warehousing, packaging, decomposition and other functions linked with handling freight, often in proximity to major transport routes or terminals, and which generate large amounts of truck traffic.
   5. Truck stops - places especially for truckers that are usually by a highway or interstate and that include a parking area, fueling services, and other facilities.
   6. Construction sites - sites of ongoing large scale commercial, industrial, or heavy civil construction.
   7. School bus depots/yards - parking areas and/or garages where school buses are stored and maintained, or where school buses queue.

If the applicant indicates that the project is in a high pollution area, the applicant must also include a description of the project location, specifically identifying it as one of these types of areas, in the project description in Attachment B.

1. Use of Small Diverse Businesses:
   1. Indicate whether or not the applicant has identified any Small Diverse Businesses (SDB), as defined by the Pennsylvania Department of General Services (DGS), which includes minority, women, veteran, and service-disabled veteran business enterprises, that may be used to supply goods or services for the proposed project.
   2. If yes, identify the business and indicate if the business was found in the PA DGS database or the federal vendor database. See below for details on the databases.
   3. The Commonwealth encourages the use of Small Diverse Businesses as prime contractors, joint ventures and subcontractors/suppliers. Small Diverse Businesses include minority, women, veteran, and service-disabled veteran business enterprises. More information can be found at the DGS website: [http://www.dgs.pa.gov/Businesses/Minority,%20Women%20and%20Veteran%20Busine](http://www.dgs.pa.gov/Businesses/Minority%2C%20Women%20and%20Veteran%20Businesses/Small-Diverse-Business-Verification/Pages/default.aspx#.V5EbsaPD-cw)  [sses/Small-Diverse-Business-Verification/Pages/default.aspx#.V5EbsaPD-cw.](http://www.dgs.pa.gov/Businesses/Minority%2C%20Women%20and%20Veteran%20Businesses/Small-Diverse-Business-Verification/Pages/default.aspx#.V5EbsaPD-cw) A database of Small Diverse Businesses can be accessed at <https://www.dgs.internet.state.pa.us/SmallDiverseBusinessSearch/>.
   4. DEP will also accept the use of vendors in the federal vendor database found using the Dynamic Small Business Search at [www.ccr.gov](http://www.ccr.gov/) (certified companies are so indicated).
2. Vehicle, Engine, or Equipment Quantity: Indicate the number of vehicles, engines, or pieces of equipment identified by the applicant as the fleet for this project. The fleet includes all

vehicles, engines, or equipment which will be retrofitted, repowered, replaced, or modified with any other eligible project type.

1. Emission Benefits: The applicant must use the EPA’s Diesel Emission Quantifier (DEQ) to quantify emission reduction estimates for the proposed project, unless DEP approves an alternate emission reduction calculation methodology. The DEQ can be found at the following website: <http://www.epa.gov/cleandiesel/quantifier/index.htm>.
   1. If you have not used the DEQ before, read the ‘Read Me First’ tab, and then proceed to the ‘Use the Quantifier’ tab. If you have used the DEQ before, proceed directly to the ‘Use the Quantifier’ tab. If an applicant needs assistance using the DEQ, the applicant may contact the EPA using the contact information on the website or the applicant may contact DEP. Applicants do not need to sign in or create an account to use the DEQ but may do so if they so choose. Insert the emission reduction estimate results from the DEQ into the table provided in the application. Additionally, the applicant must include a print-out of the DEQ results as part of Attachment C. The print-out of the results does not count towards the attachment page limit.
   2. If the emission benefits for the proposed project cannot be calculated using the DEQ, contact DEP for approval to use an alternate calculation method. If the DEQ is not used, a detailed explanation of the calculation method, including inputs and calculations, must be included as part of Attachment C.
   3. Select whether the DEQ or an alternative calculation method was used.
2. Economic and Energy Benefits:
   1. Liquid Fuel Saved – indicate, in gallons per year, the diesel fuel saved, either by increased fuel efficiency of new or modified vehicles, engines, or equipment or by the elimination of diesel fuel use by repower or replacement with an alternate fuel method, including all electric options. If the project does not result in liquid fuel savings, indicate zero (0) in the chart. Do NOT leave this section blank.
   2. Fuel Cost Savings - indicate, in dollars per year, the value of the fuel saved by the project. For retrofits, repowers or replacement projects for diesel-powered vehicles, engines, or equipment, the value of the fuel saved is the difference between the annual fuel cost for the original vehicle, engine, or equipment and the annual fuel cost for the modified or new vehicle, engine, or equipment. The manufacturer of the retrofit or repower equipment or the seller of the replacement vehicle, engine, or equipment should be able to provide the applicant with estimates for changes in fuel economy attributable to the new vehicle, engines, or equipment. For alternate fuel conversions, repowers and replacements, the value of the fuel saved is the difference between the annual fuel cost running the vehicle, engine, or equipment on conventional diesel fuel and the cost of running the vehicle, engine, or equipment on the alternate fuel. The manufacturer or distributor of the alternative fuel repower system or the alternative fuel vehicle, engine, or equipment should be able to provide the applicant with estimates for changes in fuel economy for the alternative fuel conversion, repower or replacement.
   3. Value of Goods and Services from PA Companies - indicate the value, in dollars over the project period, of goods and services the applicant intends to purchase from businesses physically located and registered as businesses in PA. If exact values are not available at the time of application, the applicant should estimate the percentage of the total requested grant funding, and the matching funds from the applicant, that the applicant intends to spend on goods and services from PA businesses.
3. Budget Summary and Detailed Budget Tables: Complete the Budget Summary and the Detailed Budget Tables. The totals in the Budget Summary must match the subtotals in the Detailed Budget Tables. Below are instructions for each category of the Detailed Budget Tables.
   1. Personnel: Administrative costs, other than salaries and benefits, are not an allowable expense under this grant program. In general, salaries for staff members contributing to the direct work of the project are eligible. Salaries are to be itemized by name and duties of staff members. This category cannot include any mark-up above the salary actually paid to employees for direct labor hours worked on the project, documented by timesheets. Benefits are covered separately below. Workers will only be reimbursed on an hourly basis for actual work performed on the project. Hourly rates will need to be verified prior to grant award by providing appropriate documentation. Tuition/course credit is not a reimbursable expense.

In general, fringe benefits that are proportional to hours worked for the grantee’s staff, itemized by names and duties of staff members for those contributing to the direct work of the project, are eligible. Benefits commonly include, among other items, health insurance, retirement, FICA withholding, worker’s compensation, and vacation and sick leave. Vacation and sick leave cannot be logged on time sheets as contributing to the work of the project. They can be included pro rata under benefits. Funding requested for benefits can be no more than 60% of the total for salaries (Hourly Rate \* Hours) and benefits requested for each person under the Personnel Category.

* 1. Contractual Category: In some cases, a grantee may use a contractor to perform some or all of the grant work. Although the contractor selection process is determined by the grantee, DEP encourages grantees to use contractors in the most cost-effective and efficient manner possible. In general, for a construction grant, the “contractual” category should not exceed 25 percent of the construction costs. If a subcontract is bid as time and materials, typical costs include:
     1. Salaries and benefits for direct work on the project when such services are not available from volunteers or regular applicant’s staff (itemized by names and duties of the contractor’s staff members);
     2. Expenses for materials directly attributable to the project, i.e., materials that are incorporated into the project and left or expended on site (e.g., hazardous waste disposal fees); and
     3. Expenses for rental fees for equipment directly attributable to the project and where not left on site.
     4. Contractors are required to follow current Commonwealth Travel Regulations (limited to current State rate). In addition, contractor administrative charges shall not exceed those allowable for the grantee.
     5. Please remember that all contractors are required to be cleared for outstanding obligations to the State, prior to their beginning work on the project.
     6. Once awarded funding, grantees must refer the name, work function, address and EIN information for any contractors planned to be used to complete the project, to their project advisor in order to get this clearance.
  2. Equipment: Equipment dedicated or directly related to the implementation of the project is generally an eligible cost (e.g., a diesel particulate filter cleaning bench). Reimbursement for any single item cannot exceed $5,000. Amounts in excess of $5,000

for any single item may be credited toward match for the project. General use tools or equipment, such as computers, uniforms, copy paper, etc., are not considered dedicated equipment. Some typical examples of allowable items include:

1. Field equipment dedicated to the project (owned by commonwealth following grant close-out). Field equipment needed for the project but not used exclusively for the project must be appropriately prorated in the budget.
2. Office equipment dedicated to the project (owned by the commonwealth until grant close-out).
3. Small tools dedicated to the project.
   1. Supplies: Only supplies dedicated to the project are eligible costs. Some typical examples of allowable costs follow:
      1. Office supplies dedicated to the project.
      2. Postage for project mailings.
4. Other office costs dedicated to the project.
5. Materials that can travel from site to site that are used for the project.
   1. Match Requirements: Match can be met with cash, in-kind goods and services or some combination of the two. Successful grantees should be certain to identify and document all match contributions with the submittal of the Statement of Expenditures (invoice and reimbursement request). Match must be expended during the grant Period of Performance. Funds expended prior to the grant Period of Performance are not eligible, unless otherwise stated in a grant agreement. Costs claimed as match can be paid for with other sources of grants, from the organization's normal operating budget, or out of fundraising specific to the project. Note: Federal grant money cannot be used as matching funds for the PA State Clean Diesel Grant Program.
      1. Cash Match: Examples of documentation include, but are not limited to:
         1. Copy of check from donor.
         2. Letter of commitment from donor.
      2. Non-Cash Match: Charges allowed for match:
         1. Value of volunteers' donated time, including time to travel to work sites. Dollar values may be obtained at [www.independentsector.org.](http://www.independentsector.org/) Search for Value of Volunteer Time. Scroll down to state table.
         2. Rate related to nature of work, not to volunteers' usual charge rate, i.e.:
            1. Manual labor would be calculated at prevailing rate for manual labor.
            2. Donated professional engineer's time would be calculated at prevailing rate for engineer’s time.
         3. Administrative costs.
         4. Travel at State travel rates.
         5. Publicity charges, public relations costs, advertisement fees, unless specific to the project.
         6. Indirect costs not otherwise listed under an eligible category.
      3. Charges not allowed for match or for reimbursement:
         1. Any costs associated with lobbying, alcohol or allowance for bad debts.
         2. Additional funds that were provided by DEP under another program.
         3. Contract contingency costs and other rate factors that do not reflect actual expenses.
         4. Costs associated with legal action against the Commonwealth.
         5. Costs associated with illegal activities or substances.
         6. Costs associated with goods or services for personal use of Board members, officers or others.
6. A and B: Attachments

All attachments should be typed in 12 point Times New Roman font and be single spaced. Each attachment should be identified by its letter (i.e. Attachment A, Attachment B, etc. through Attachment E) in the document heading, the header, the footer or a cover page (cover page does not count toward attachment page limit). The Vehicle and Equipment Description Reporting Form (Attachment D) and supporting documentation included in Attachment E below do not need to be labeled. For attachments that have subheadings, subheadings should be clearly labeled for each section. Attachments A-C and Executive Summary should be no more than 15 total pages. Attachments D and E do not count toward the total page limit. Graphics, such as maps or tables, count toward the page count for each attachment.

If the applicant is using the ‘fill-in-the-blank’ application, the applicant should fill in the Executive Summary section in the application. Provide an abstract of the proposed project that briefly describes the issue, proposed steps to address the issue and the expected results or benefits. It should be clear, concise, specific and no longer than 500 words (3,200 characters).

Include the following attachments with the completed application:

* Executive Summary: If the applicant is using the plain text application, include the Executive Summary as an attachment labeled ‘Executive Summary.’ The Executive Summary should be no longer than 500 words (approximately 1 page).
  1. Business Plan: Provide a summary of the applicant organization’s business plan. A business plan is generally defined as a formal statement of a set of business goals, the reasons the goals are believed attainable, the plan for reaching those goals and background information about the organization. The business plan should describe the organization, how diesel fleets relate to the organization, and goals relating to the diesel fleet. **For projects subject to useful life limitations, including replacements and repowers, the business plan must include a detailed description of the applicant organization’s normal attrition schedule, operating budget, maintenance and replacement plan or any other organizational plan that determines the replacement schedule for vehicles or equipment** and must explain how the proposed emission reductions are not a result of vehicle/equipment replacements or repowers that would have occurred through normal attrition/fleet turnover within three years of the project start date. This is required to ensure that the proposed fleet meets useful life requirements. See Section III. Eligibility Information of the Guidelines for useful life requirements for each project type. The business plan should be no more than two (2) pages total.
  2. Detailed Project Description and Work Plan with Schedule: The detailed project description and work plan should be no more than seven (7) pages total.
     1. Project Description: Applicants must provide a description of the proposed fleet and project type. For projects subject to useful life limitations, the project description should include confirmation that the proposed fleet meets those limitations, either by

listing the remaining useful life for each vehicle or piece of equipment proposed for the project or by referencing the business plan or other attachment that details the remaining useful life of the fleet. If the project is in a “high-pollution area,” provide details of the location under this section.

* + 1. Goals and Objectives: Applicants must describe, in detail, the project’s goals and objectives which may include qualitative descriptions of anticipated emission reductions, improved health for employees or customers, updating fleets or any other goals or objectives that relate to the applicant organization’s business plan. Applicants should discuss the project’s sustainability, which may include how long the applicant will operate the vehicle or equipment selected for the proposed project, if and how the applicant will promote or share information about the technology utilized in the proposed project within or outside of the applicant’s organization, and the future goals of the applicant relating to emission reductions from their fleet.
    2. Need for the Project and Need for the Grant: Applicants should identify the problem to be solved or the need the proposed project is intended to address. Explain why the problem or need exists and how the proposed project addresses the problem or need. If applicable, discuss alternative approaches to solving the problem and why the proposed solution is best. Explain why the proposed project should be funded, and elaborate on its cost-effectiveness. Provide literature and references where appropriate.
    3. Equipment Scrappage/Disposition: Certain eligible project types under the PA State Clean Diesel Grant Program require existing equipment, engines, or vehicles to be rendered permanently inoperable and disposed of in an environmentally friendly manner. Scrappage or disposition requirements will be detailed in the grant agreement and are included in this document under the relevant project type in Section III. Eligibility Information. In this section, if applicable, the applicant must provide information on how it intends to meet those requirements. Proof of scrappage or disposition, including documentation and DEP on-site inspection or photograph, must be completed before a project is considered complete. If applicable, applicants should indicate if the sale of part or all of the existing equipment or vehicles is planned. If the sale of part or all of the existing equipment or vehicles occurs, program income requirements will apply and will be detailed in the grant agreement.
    4. Partnerships and Community Engagement: Applicants should identify any other organizations that will help to complete the project and specify the nature of their participation. Discuss in-kind services or match contributions. Please use values commensurate with professional ability and qualifications when calculating volunteer salaries. If you have not yet identified your contractors, please specify how you will select them.
    5. Work Plan with Schedule: Applicants must provide a preliminary work plan that includes an implementation schedule identifying sub-tasks, schedule for their completion and identification of parties responsible for their accomplishment. A final work plan will be included in the grant agreement. The intent of this requirement is to show that the applicant can complete the project in the time proposed.
  1. Environmental, Energy, and Economic Benefits: If using the DEQ, Environmental, Energy, and Economic Benefits should be no more than three (3) pages total. If the

applicant is not using the DEQ, two (2) additional pages may be included to describe the calculation method used by the applicant.

* + 1. Environmental Benefits: Applicants utilizing the EPA’s DEQ model should include a print-out of the DEQ results as part of this Attachment. The print-out does not count towards the attachment page total. If the DEQ is used, state ‘See DEQ print-out for emission reductions’ in this section of Attachment C. In addition to the print-out, the applicant should identify any model input information that is not included in the Vehicle and Equipment Description Reporting Form (Attachment D). If the applicant has received approval from DEP to use an alternate environmental benefit calculation method, this section must include a clear description of the calculation method and the expected environmental benefits, including careful estimates and calculations detailing anticipated emission reductions for the pollutants listed on the application. The DEQ can be used to confirm environmental benefits at the end of the project. If an alternate calculation method is used for the application, describe how that method can be used to verify the environmental benefits at the end of the project.
    2. Energy Benefits: Applicants must provide detailed calculations and inputs for the calculation of liquid fuel saved and fuel cost savings. See Question 17 in the Application Instructions for additional details about the calculation of the energy benefits.
    3. Economic Benefits: Applicants must provide detailed calculations and inputs for the calculations for the value of goods and services from PA companies. See Question 18 in the Application instructions for additional details about the calculation of the economic benefits. If additional economic benefits will be realized, including but not limited to savings to consumers, revenue generation for the Commonwealth, reduced dependence on foreign oil, decreased transportation, or reduction of operating costs, the applicant should provide an explanation of the potential benefit, including quantitative details, if available.
  1. Vehicle and Equipment Description Reporting Form
     1. The form is available for download with the other program documents or electronically by request from DEP.
     2. This form does not count towards the page total limit for attachments.
     3. The Vehicle and Equipment Description Reporting Form is a Microsoft Excel Spreadsheet that includes, but is not limited to, the following information:
        1. Existing vehicle/equipment make, model, and model year
        2. Engine power
        3. Idling time
        4. Fuel use and type
        5. Current and future emission standard levels of engines/equipment/vehicles
        6. Year and type of retrofit/repower/replacement
        7. Idling hours and idling hours reduced
        8. New vehicle/equipment make, model, and model year
  2. Applicant should attach any letters of financial commitment, letters of support or any other pertinent information suitable for review. Attachments under this section do not count toward the page limits for Attachments A-C and the Executive Summary. There is no page limit for these attachments.

## Application Review, Scoring, and Selection

1. Application Review and Scoring

DEP will conduct a comprehensive review of the grant application and supporting documentation. DEP will not be responsible for an application that is rejected due to incomplete or inaccurate information. All complete applications will be reviewed and evaluated by a panel of air quality experts using the criteria defined below. Possible points for each item are listed.

|  |  |  |
| --- | --- | --- |
| **Scoring Matrix** | |  |
| **Eligibility** | **Yes/No** |  |
| Applicant is an Eligible Applicant |  |  |
| Project is an Eligible Project Type |  |  |
| Project Fleet is an Eligible Fleet |  |  |
| Project Can Be Completed by September 30, 2017 |  |  |
| Project is Technically Feasible |  |  |
| Project Results in Environmental Benefit to the Commonwealth |  |  |
| Applicant Meets Minimum Match Requirements |  |  |
|  |  |  |
| **Topic** | **Possible Points** | **Score** |
| Emission Reductions: Under this section, points are awarded based on the percentage of annual emissions reduced from the baseline for each pollutant. 0% reduction - 0 points 1% -25% reduction - 5 points 26% - 50% reduction - 10 points 51% - 75% reduction - 15 points 76% or greater reduction - 20 points | 0 to 20 points for each pollutant (60 points total available) |  |
| Emission Reductions: PM. |  |  |
| Emission Reductions: NOx |  |  |
| Emission Reductions: VOC or HC |  |  |
| Total Emission Reductions: Under this section, points are awarded based on the total annual emission reductions of the project. Emission reductions of PM, NOX, and VOC or HC (converted to VOC) will be combined. Valid applications will be compared to all other valid applications and ranked from the most total emission reductions to the least total emission reductions. Maximum points available will be the number of applications received (X). The applicant with the highest total emission reductions will receive (X) points. The next highest applicant will receive (X-1) points and so on. | X points |  |
| Total Emission Reduction Points |  |  |
| Fleet Size: Under this section, points are awarded for the number of vehicles or engines in the fleet proposed for retrofit, repower, replacement or other modification under the grant program. | 5 to 15 points |  |
| Fleet Size (Vehicles and/or Engines): 1 to 4 - 5 points |  |  |
| Fleet Size (Vehicles and/or Engines): 5 to 8 - 10 points |
| Fleet Size (Vehicles and/or Engines): Greater than 8 - 15 points |
| Match Funding: Under this section, points are awarded based on whether the applicant meets or exceeds match requirements. Match requirements are specific to each project type. Applicants must meet minimum match requirements and provide proof of the matching funds. | 5 to 10 points |  |
| Match Funding - Meets or Exceeds Match Requirement up to 5% Above Requirement- 5 points |  |  |
| Match Funding - Exceeds Match Requirement by More Than 5% of Requirement - 10 points |
| Project Location: Under this section, points are awarded based on the location of the project. | 0 to 25 points |  |
| Located in a Priority Area - 5 points |  |  |
| Located in a High Pollution Area - 5 points |  |  |
| Located in a Brownfield - 5 points |  |  |
| Located in an Environmental Justice Area - 5 points |  |  |
| Located in an Act 47 Financially Distressed Municipality - 5 points |  |  |
| Attachment A. Business Plan - Points are awarded if the applicant has adequately described the organization, described how diesel fleets relate to the organization, and described the goals relating to the diesel fleets. If an attrition schedule is required, it must also be included in Attachment A. Points will range from 0 to 10 points. | 0 to 10 points |  |
| Attachment B. Detailed Project Description and Work Plan with Schedule - Points are awarded if the applicant has provided information meeting the requirements in the application instructions for Project Description, Goals and Objectives, Need for the Project and Need for the Grant, Equipment Scrappage/Disposition, and Partnerships and Community Engagement. Points are awarded for the Work Plan portion if there is sufficient detail in the work plan and schedule to demonstrate that the project can be completed as proposed in the timeframe proposed, and if the applicant provides sufficient justification for the goals and objectives, need for the project and need for the grant. Points will range from 0 to 15 points. | 0 to 15 points |  |
| Attachment C. Environmental, Energy, and Economic Benefits - Points are awarded if the applicant has provided enough information to meet the requirements in the application instructions for Environmental Benefits, Energy Benefits, and Economic Benefits, including all required calculations and methodology explanations. Points will range from 0 to 10 points. | 0 to 10 points |  |
| Attachment D. Vehicle/Equipment Description Reporting Form - Points are awarded if the applicant has completed the form, and the information matches the information listed in the rest of the grant application (i.e. numbers and types of vehicles and project types must match). Points will range from 0 to 5 points. | 0 to 5 points |  |
| **TOTAL POINTS** | **11 to 150+X\* points** |  |

\*Dependent on number of applicants. Total possible points will increase by the number of applicants (X).

1. Project Selection
   1. All complete applications will be reviewed by DEP staff, based on the criteria listed above in the scoring matrix.
   2. Applications with the highest scores, that meet all other requirements, will be considered first for funding.
   3. If additional funds remain, additional funding offers will be made to the next highest scoring applicant.
   4. If remaining funds are not adequate to meet the funding request of the next highest scoring applicant, DEP will contact the applicant to see if they would accept funding at a lower level than requested in the application.
2. Notification of Applicants
   1. All applicants will receive a letter from the DEP Secretary or designee, addressed to the contact person specified in the application, notifying the applicant whether or not they are being offered grant funding.
   2. If an application is not selected for funding, the applicant can contact DEP if they wish to discuss the details of why the application was not selected. Applications may not be selected for funding for incomplete applications, lower score ranking than other applications, or lack of funds to award.
   3. Successful applicants will be assigned a DEP project advisor; grantees may be required to meet with DEP staff to review contract requirements.
   4. After the announcement of a grant award, DEP will forward a grant agreement to the successful applicant. Successful applicants will be required to execute the grant agreement, including a detailed scope of work, project schedule, budget and other information.
   5. If applicants selected for funding do not have a DUNS Number or SAP Vendor Number at the time of award announcement, project work cannot begin until registration for both is complete. See Section VII.2.b. and 2.c. of the application instructions for additional information.

## Webinar Information

DEP staff facilitated a webinar (web-based information session) during the first round of funding for the FY2014-2016 PA State Clean Diesel Grant Program on November 30, 2016 to provide general information about the grant program and to answer any questions from attendees relating to the program, including questions about the application form and instructions. The webinar was recorded and posted online at <http://www.dep.pa.gov/Business/Air/BAQ/Pages/default.aspx> under the ‘Grant Availability’ heading.

## How to Apply

DEP is accepting applications for the PA State Clean Diesel Grant Program. The application opportunity and the due date are announced in the *Pennsylvania Bulletin* (46 *Pa.B.* 7203, April 8, 2017) and on the DEP Web site. DEP reserves the right to request missing information or modifications to the application from the applicant from the date of submission to two weeks after the close of the application period. Applicants will have one week after such a request to provide the requested information. DEP may also offer an additional opportunity to apply for funds through the PA State Clean Diesel Grant Program within the same fiscal year.

Any additional application opportunity and application deadline will be announced by a notice published in the *Pennsylvania Bulletin* and on the DEP Web site.

## Applicants must submit:

1. **Original grant application package, including attachments.**
2. **Three copies of the completed grant application and all attachments.**

**Complete submissions must be postmarked by 4 p.m. (EST) on or before December 28, 2016. Send applications to:**

DEP - Bureau of Air Quality ARM/Mobile Sources

400 Market Street, 12th Floor, RCSOB

P.O. Box 8468

Harrisburg, PA 17105-8468

Sufficient time should be allowed for mail delivery of the application. The PA State Clean Diesel Grant Program does not accept permanent bindings, cover sheets of any kind, e-mails, compact discs or faxes. Please use staples only and submit double-sided copies.

## Late submittals will not be accepted.

**DEP Assistance and Contacts**

Questions regarding the grant program, application materials, and webinar registration: Samantha Harmon at (717) 705-7686 or by e-mail at [saharmon@pa.gov](mailto:saharmon@pa.gov)

Grants processing, application submission, and deadlines:

Dawn Levarto at (717) 772-3433 or by e-mail at [dlevarto@pa.gov](mailto:dlevarto@pa.gov)



## PENNSYLVANIA STATE CLEAN DIESEL GRANT PROGRAM PROJECT APPLICATION FY2014-2016

**This form is to be used to apply for the Pennsylvania State Clean Diesel Grant Program. Please refer to instructions and guidance/guidelines for assistance.**

**Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this application are true and correct:**

**Applicant Organization:**      

**Printed Name:**      

**Title:**      

**Signature:**

**Date:** Click here to enter a date.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Project Title (10 words maximum):
2. Applicant Legal Organizational Name:

DBA Name:

Mailing Address:

1. Applicant’s Federal Taxpayer Identification Number:
2. Applicant’s DUNS Number:
3. Applicant’s SAP Vendor Number:
4. Is the applicant a business with fewer than 100 full-time equivalent employees?

Yes  No

1. Organization type:
2. If Other is selected, explain here:
3. Is the applicant an approved distressed municipality under Act 47, Financially Distressed Municipalities Act of 1987?  Yes  No

4. Project Contact Person:

Phone: (   )       Extension:

Fax: (   )

E-Mail:

5. Project Site Address:

Street Address:

City/Town:

NINE-Digit ZIP Code [mandatory]

Municipality:

County(ies) of operation:

Check if multiple counties or statewide:

6. Indicate the total reimbursement you will request during the following periods. Please ensure that the numbers in Question 19 add up to the requested grant amount: $

Actual  Estimated

7. Identify the project duration, including start date, end date, and total time in weeks or months.   
Start Date: Click here to enter a date. End Date: Click here to enter a date. Total Time:

*Please note: Project period begins upon grant award and must end by 9/30/2017, unless an extension is granted by DEP.*

8. Project Type (Choose the one category best describing the project; see instructions for detailed Project Type descriptions.)

Purchase and installation of EPA or CARB certified/verified exhaust controls

Purchase and installation of EPA or CARB certified/verified engine upgrade

Purchase and installation of EPA or CARB certified/verified idle reduction technology – Must be in combination with verified exhaust controls except for locomotive, marine shore power, truck stop electrification and school bus (MY2006 and newer) projects.

Purchase and installation of EPA or CARB certified/verified aerodynamic technologies and low rolling resistance tires – Must be in combination with verified exhaust controls.

Certified diesel vehicle or equipment engine repower, including clean alternative fuel repowers

Diesel vehicle or equipment replacement, including clean alternative fuel replacements

Clean alternative fuel conversions

9. Please provide the name of the DEP staff person with whom you discussed your application, if any:

10. Are facilities or infrastructure developments or improvements needed for this project?  Yes  No

If yes, is your project consistent with a county, municipal or multi-municipal comprehensive plan or zoning ordinance?  Yes  No

11. Has this proposal been submitted to another source for funding?  Yes  No

Name of other source and anticipated award date:

12. Is the project located on a:

1. brownfield (a vacant, previously utilized site)?  Yes  No
2. designated Environmental Justice site?  Yes  No

13. Is the project located in a priority area, as defined in the application instructions?

Yes  No If yes, identify the county(ies):

14. Is the project located in a ‘high-pollution area,’ as defined in the application instructions?

If yes, select the type of ‘high-pollution area’ from the choices below:

Port  Rail yard  Terminal  Distribution center

Truck Stop  Construction site  School bus yards/depot

Additionally, include a description of the location in the project description.

15. Has the applicant identified any Small Diverse Businesses, which includes minority, women, veteran, and service-disabled veteran business enterprises, that may be used to supply goods or services for the proposed project?

Yes  No

If yes, identify the business and indicate if the business was found in the PA Department of General Services (DGS) database or the federal vendor database. See application instructions for details on the databases.

Business Name(s):

DGS  Federal Vendor Database

16. How many vehicles or pieces of equipment are proposed for this project?

17. Use the U.S. EPA’s Diesel Emission Quantifier (DEQ) to quantify emission reduction estimates for this project. See the application instructions for more information on using the DEQ. If your project emission reductions cannot be estimated using the DEQ, contact the Department to receive approval for an alternate calculation method.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Annual Emission Summary** | NOX | PM2.5 | HC | CO | CO2 |
| Baseline of Vehicles Retrofitted/Modified (tons/year) |  |  |  |  |  |
| Percent Reduced (%) |  |  |  |  |  |
| Amount Reduced Per Year \*(tons/year) |  |  |  |  |  |
| Amount Reduced Per Year \*(lbs/year) |  |  |  |  |  |

(17 cont.) Select one:  DEQ Emissions  Alternative Calculation Emissions

18. Estimate the economic and energy savings that will result from the project.

| *(Insert more rows if necessary)* | Quantity |
| --- | --- |
| Liquid Fuel Saved | gals/yr |
| Fuel Cost Savings | $      ($/yr) |
| Value of Goods and Services from Pennsylvania Companies | $       ($ over entire project) |

19.Complete the budget summary and detailed budget worksheet. Total for all categories (without matching funds) should equal the total project grant request in Question 6.

Budget Summary (Must be consistent with the Detailed Budget Tables):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CATEGORY** | **GRANT REQUEST**  **(FROM DEP)** | **+** | **MATCH**  **(FROM APPLICANT)** | **=** | **PROJECT COST**  **(TOTAL)** |
| Personnel | $ | + | $ | = | $ |
| Contractual | $ | + | $ | = | $ |
| Equipment | $ | + | $ | = | $ |
| Supplies | $ | + | $ | = | $ |
| **Total for each column:** | $ | + | $ | = | $ |

Detailed Budget Tables

1. PERSONNEL

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TASK** | **PERSONNEL** | **HOURLY RATE** | **HOURS** | **BENEFITS** | **TOTAL COST** |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
| **TOTAL PERSONNEL SALARIES AND BENEFITS** | | | | | **$** |

1. CONTRACTUAL

1. CONTRACTOR SALARIES (List billing rate by task. Salary ranges are not acceptable; see application instructions for fitting expenditures within budget categories.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TASK** | **CONTRACTOR** | **HOURLY RATE** | **HOURS** | **BENEFITS** | **TOTAL COST** |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
|  |  | $ |  | $ | $ |
| **TOTAL CONTRACTUAL SALARIES AND BENEFITS** | | | | | **$** |

2. OTHER CONTRACTUAL EXPENSES

|  |  |
| --- | --- |
| **ITEM** | **COST** |
| **Other (List specific item)** | **$** |
|  | $ |
|  | $ |
|  | $ |
|  | $ |
| **TOTAL OTHER CONTRACTUAL EXPENSES** | **$** |

3. TOTAL CONTRACTUAL (=1+2)

|  |  |  |
| --- | --- | --- |
| **CONTRACTOR SALARIES AND BENEFITS** | **OTHER CONTRACTUAL EXPENSES** | **TOTAL CONTRACTUAL EXPENSES** |
| $ | $ | $ |

1. EQUIPMENT (Construction-Related Costs)

|  |  |  |  |
| --- | --- | --- | --- |
| **ITEM** | **QUANTITY** | **COST PER ITEM** | **TOTAL COST** |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
| **TOTAL EQUIPMENT** | | | **$** |

1. SUPPLIES (Non-Construction-Related Costs)

|  |  |  |  |
| --- | --- | --- | --- |
| **ITEM** | **QUANTITY** | **COST PER ITEM** | **TOTAL COST** |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
|  |  | $ | $ |
| **TOTAL SUPPLIES** | | | **$** |

1. MATCH

Please use the following table to calculate matching contributions of cash, goods and services to be entered on the application form. All items listed must be accompanied by a letter of commitment.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CONTRIBUTOR** | **BUDGET CATEGORY** | **DESCRIPTION** | **STATUS** | **VALUE  (in $)** |
|  |  |  |  | $ |
|  |  |  |  | $ |
|  |  |  |  | $ |
|  |  |  |  | $ |

20.A. Executive Summary

|  |
| --- |
|  |

20. B. Attachments

Attachment A: Business Plan

Attachment B: Detailed Project Description and Work Plan with Schedule

Attachment C: Environmental, Energy, and Economic Benefits

Attachment E: Vehicle/Equipment Description Reporting Form (Microsoft Excel format)

Attachment F: Supporting Documentation