



# National Clean Diesel Campaign

## FY 2017 STATE CLEAN DIESEL GRANT PROGRAM INFORMATION GUIDE

## **SUMMARY**

EPA's Office of Transportation and Air Quality is soliciting proposals from eligible states and territories for participation in the fiscal year (FY) 2017 Diesel Emission Reduction Program (DERA), State Clean Diesel Grant Program. EPA anticipates approximately \$29 - 50 million available for the FY 2017 DERA Program. Actual funding is dependent on final Congressional appropriation for FY 2017. In accordance with DERA, EPA makes 30 percent (approximately \$8.6 – 14.9 million for FY 2017) of the annual allocation available to states and territories in the form of assistance agreements under the State Clean Diesel Grant Program. Funding can support grant, rebate, and loan programs administered by eligible states or territories that are designed to achieve significant reductions in diesel emissions.

The State Clean Diesel Grant Program is not a competition; it is an allocation process in which the eligible states and territories submit their interest to participate to EPA, and EPA awards a specific allocation by formula, based on the number of states and territories with approved applications that participate. FY 2017 funding will award to participating states as a new award.

In general, states and territories must complete all work on FY 2014-2016 DERA State Program grants by September 30, 2017 in order to receive FY 2017 funding.

Under the State Clean Diesel Grant Program, eligible diesel emission reduction solutions include verified emission control technologies such as exhaust controls, cleaner fuels, and engine upgrades, verified idle reduction technologies, verified aerodynamic technologies and low rolling resistance tires, certified engine replacements, and/or certified vehicle or equipment replacement. Eligible diesel vehicles, engines and equipment may include buses, Class 5 – Class 8 heavy-duty highway vehicles, marine engines, locomotives and nonroad engines, equipment or vehicles used in construction, handling of cargo (including at a port or airport), agriculture, mining or energy production (including stationary generators and pumps).

This document contains the FY 2017 State Clean Diesel Grant Program information for both internal and external stakeholders. All public materials for the State Clean Diesel Grant Program are available at [www.epa.gov/cleandiesel/clean-diesel-state-allocations](http://www.epa.gov/cleandiesel/clean-diesel-state-allocations).

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## **I. OVERVIEW**

This document, the FY 2017 State Clean Diesel Grant Program Information Guide, consolidates and streamlines the programmatic requirements applicable to all new State Clean Diesel Grant Program awards receiving FY2017 funding. All projects funded with FY 2017 State Clean Diesel Grant Program funds must meet all eligibility and funding requirements set forth in this program guide.

This document provides information to EPA Regions and to participating states and territories concerning how the Agency intends to exercise its discretion in awarding and managing State Clean Diesel Grant Program rebates, grants, and/or loans for FY 2017. This guidance is designed to provide national policy on these issues. Some of the statutory provisions described in this document contain legally binding requirements. However, this document does not substitute for those provisions or regulations, nor is it a regulation itself. Thus, it cannot impose legally binding requirements on EPA, states, territories or the regulated community, and may not apply to a particular situation based upon the circumstances. Any decisions regarding a particular situation will be made, based on the statutes and regulations, and EPA decision-makers retain the discretion to adopt approaches on a case-by-case basis, that differ from this guidance where appropriate.

## **II. STATUTORY AUTHORITY**

Title VII, Subtitle G, Section 793 of the Diesel Emissions Reduction Program (DERA) in the Energy Policy Act of 2005 (codified at 42 U.S.C. 16133) authorizes the U.S. Environmental Protection Agency (EPA) to support grant, rebate, and loan programs, administered by eligible states or territories, which are designed to achieve significant reductions in diesel emissions. This program is referred to as the *State Clean Diesel Grant Program* (the Program). While EPA has authority under DERA to support grant programs, EPA's authority to obligate grant funds is subject to the availability of appropriated funds.

## **III. ELIGIBLE APPLICANTS**

Eligibility to apply for and receive funds under the Program is limited to the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands. For the purposes of this document, the term "state" will be used to describe the 50 states and the District of Columbia, Puerto Rico, Guam, the US Virgin Islands, American Samoa and the Commonwealth of the Northern Mariana Islands.

EPA presumes that the state agency with jurisdiction over air quality will be the lead agency to receive these funds. If a state's circumstances dictate that another state agency administer the funds, then a letter from the state governor or designee to the Administrator of EPA is required in order to certify one state Agency as the recipient of funds who has the legal and administrative authority to enter into a grant or cooperative agreement with EPA. Upon receipt, EPA will consider that agency the lead agency from that point forward. However, if there is a change, a new Governor's letter to the Administrator must be submitted during the renewal process and the new agency would be considered the lead agency for future grants. For fiscal year 2017, the letter to identify an alternate

lead agency and provide specific contact information should be sent to the following contacts and be received on or before May 1, 2017.

Catherine McCabe  
Acting Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave, N.W., Mail Code: 1101A  
Washington, DC 20460

Cc: Jennifer Keller, Director  
Legacy Fleets Incentives and Assessment Center  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W., Mail Code: 6406A  
Washington, DC 20460  
Phone: (202) 343-9541, Fax: (202) 343-2803, Email: [keller.jennifer@epa.gov](mailto:keller.jennifer@epa.gov)

#### **IV. FY 2017 FUNDING SCHEDULE AND PROCEDURES**

The steps below outline the procedure and schedule for states to participate in the FY 2017 State Clean Diesel Grant Program.

- A. February 13, 2017:** OTAQ sends all eligible states the FY 2017 Program materials.
- B. February 24, 2017:** Deadline for all participating states and territories to submit a Notice of Intent to Participate (NOIP) to OTAQ via email ([CleanDiesel@epa.gov](mailto:CleanDiesel@epa.gov)).
- C. April 14, 2017:** Deadline for submitting draft workplan and budget to EPA Regional Project Officer (PO) for review and approval
- D. May 2, 2017:** Regions will inform the states of their final allocation via email and/or hard copy.
- E. May 19, 2017:** Deadline for participating states and territories to make updates or revisions to workplans as needed and to submit their final approved workplan and budget to EPA through [www.Grants.gov](http://www.Grants.gov).
- F. October 1, 2017:** Project period for FY 2017 awards begins. Regional offices will finalize the FY 2017 Program awards prior to October 1, 2017.

**Please note:** The schedule for steps D and E above assumes a final FY 2017 DERA budget appropriation by April 28, 2017. This schedule is subject to change and updated guidance will be provided directly to states as needed.

## **V. NOTICE OF INTENT**

States that want to receive FY 2017 State Clean Diesel Grant Program funding must submit a Notice of intent to Participate (NOIP).

### **A. Notice of Intent to Participate:**

In general, any state with an open Program award from FY 2014 - 2016 must ensure that the project period of the FY 2014 - 2016 award ends by September 30, 2017, in order for the state to receive FY 2017 funding. This means that vehicles/equipment should be delivered, technologies installed, and clean diesel project work completed by September 30, 2017. If the state has already obligated but not drawn down funds by the grant period end date, it will have to make a final request for a drawdown payment. If the state is unable to complete all the tasks outlined in the work plan and obligate or expend all FY 2014 - 2016 funds by September 30, 2017, the Region can close out the FY 2014 - 2016 award and de-obligate the remaining funds so that the state can participate in the FY2017 Program.

Alternatively, if a state with an open Program award from FY 2014 – 2016 is unable to complete all the tasks outlined in the work plan and obligate or expend all FY 2014 – 2016 funds by September 30, 2017, the state can request a no-cost time extension of the project period. However, a state requesting a no-cost time extension for a currently open FY 2014 – 2016 Program award may not be able to receive FY 2017 Program funding. Requests to extend previous awards and also receive a new award will be evaluated and approved by the EPA Regional program office on a case-by-case basis. Approval is dependent on the status of the project and unexpended funds, the ability to complete the project in 3-6 months, and assurances that completion of the project will not negatively affect the state's ability to implement its FY 2017 workplan.

**B. Voluntary Match Incentive:** The NOIP must indicate whether or not the state intends to voluntarily contribute funding to the FY 2017 Program project budget. The NOIP must indicate the amount and sources of non-federal voluntary matching funds.

If a state provides a voluntary match equal to the base allocation offered by EPA, EPA will provide a matching incentive equal to 50 percent of the base allocation. For example: A state legislature has provided \$1M per year to the state air agency to fund clean diesel activities in the state. If EPA offers a base allocation of \$200,000 to the state, the state could contribute \$200,000 of the state funding as a voluntary match and the state would receive an additional \$100,000 in EPA funding as a matching incentive. The total project budget would then be \$500,000, not including any mandatory cost-share funds.

The voluntary match may be satisfied by allowable costs incurred by the state (i.e. in-kind contributions), or by cash donations of state funds or private funds. State voluntary matching funds included in the approved project budget are subject to the same terms and conditions and

funding limits as the awarded DERA funds. A recipient is legally obligated to expend any voluntary match included in the approved project budget within the project period of that award.

Mandatory cost-share funds provided by the state and/or eligible third parties cannot count towards the state's voluntary matching funds to qualify for the matching incentive. See Section X for additional information on mandatory cost-share requirements. Detailed sample budgets representing various mandatory cost-share versus voluntary match scenarios are available on the State Clean Diesel website, titled "State Budget Example" at: [www.epa.gov/cleandiesel/clean-diesel-state-allocations](http://www.epa.gov/cleandiesel/clean-diesel-state-allocations).

**C. Submission of the NOIP:** The Notice, which is available in a fillable Word form ([www.epa.gov/cleandiesel/clean-diesel-state-allocations](http://www.epa.gov/cleandiesel/clean-diesel-state-allocations)), can be submitted in one of two ways: 1) a state can fill out the form electronically or by hand, print and sign the document, scan the document, and return the document via email at [CleanDiesel@epa.gov](mailto:CleanDiesel@epa.gov); or 2) a state can fill out the form electronically, digitally sign the document, save the document and return via email at [CleanDiesel@epa.gov](mailto:CleanDiesel@epa.gov). The Notice must be signed by the Environmental Commissioner or other authorized official, but does not need to be emailed from this person directly; the Notice can be emailed from the programmatic contact at the state.

**D. Review of the NOIP:** OTAQ will forward the Notices to the appropriate EPA Regional Office for review. Regions will work with the states as necessary to resolve any identified issues.

## **VI. ALLOCATION OF FUNDS**

**A. Allocation Formula:** EPA anticipates approximately \$29 - 50 million available for the FY 2017 DERA Program. Actual funding is dependent on final Congressional appropriation for FY 2017. In accordance with 42 U.S.C. 16133, subject to the availability of appropriations, EPA makes 30 percent (approximately \$8.6 - 14.9 million for FY 2017) of the DERA Program's annual allocation available to states and territories in the form of assistance agreements under the State Clean Diesel Grant Program. This 30 percent is divided: two-thirds is provided as a base allocation and one-third is provided as an incentive to match.

If all 50 states, the District of Columbia, and the five qualifying territories participate in the FY 2017 program, then the 50 states, the District of Columbia, and Puerto Rico will each receive 1.887 percent of the two-thirds of the funds set aside for the State Clean Diesel Grant Program as a potential base allocation. The remaining territories each qualify for 0.472 percent of the two-thirds of the funds set aside for the State Clean Diesel Grant Program as a potential base allocation. If fewer than all 50 states, the District of Columbia, and the five qualifying territories submit a NOIP in FY 2017, then the population formula outlined in 42 U.S.C. 16133(c)(2)(B) will be applied to any unclaimed base funds, and these funds will be added to the all participating states' and territories' potential base allocations. In that case, OTAQ will perform the allocation calculation using the U.S. Census Bureau estimated population data for 2010,

found at [www.census.gov/2010census/](http://www.census.gov/2010census/). Unclaimed funds from the State Clean Diesel Grant Program will revert to the National Clean Diesel Program.

Participating states and territories may choose to voluntarily match the EPA award amount. If a state or territory provides a state match equal to the base allocation awarded by EPA, EPA will provide a matching bonus equal to 50 percent of the base allocation. See Section V.B for additional information on the voluntary match incentive.

- B. Allocation Notification:** OTAQ will prepare draft formal funding allocation letters and send them to the Regions. Regions should send the formal funding allocation letters to their states and territories via email and follow-up with a hardcopy letter with original signatures.

## **VII. APPLICATION PACKAGE AND SUBMISSION INFORMATION**

- A. Content of Application Package:** The application package must include all of the following materials:

1. **Standard Form (SF) 424**, Application for Federal Assistance
2. **Standard Form (SF) 424A**, Budget Information
3. **Standard Form (SF) 424B**, Assurances for Non Construction Programs
4. **Key Contacts Form**
5. **EPA Form 4700-4**, Preaward Compliance Review
6. **Certification Regarding Lobbying** (Grants.gov Lobbying Form)
7. **Project Narrative Attachment Form, with final Work Plan and Budget Narrative** attached. States must use the template available at [www.epa.gov/cleandiesel/clean-diesel-state-allocations](http://www.epa.gov/cleandiesel/clean-diesel-state-allocations) to prepare their Work Plan and Budget Narrative.

### **B. Grants.gov Application Instructions**

1. Your organization's authorized official representative (AOR) must submit your complete application package electronically to EPA through Grants.gov ([www.Grants.gov](http://www.Grants.gov)).
2. Follow the steps below to download, complete, and submit an application package through [Grants.gov](http://Grants.gov). The application package contains the required forms listed above.
  - a) Go to [Grants.gov](http://Grants.gov) and then click on the "Applicants" tab in the horizontal row of blue tabs. A drop down list will appear.



- b) Click on “Apply for Grants.”
- c) Click on the red button titled, “Get Application Package,” on the right hand side of the page.
- d) Search by **Funding Opportunity Number: EPA-CEP-01**, or by **CFDA#: 66.040**.
- e) From the list of Opportunity Package(s) currently available, click on the “Select Package” corresponding with CFDA#: 66.040.
- f) Enter your email or check the box titled, “No, I do not wish to provide my email.” Then click on the gray box titled, “Submit”.
- g) You can now access and download Application Instructions as well as the Application Package from this webpage.
- h) After downloading an application and saving it, you do not need to be online to complete the application.
- i) Complete the required forms listed above, including uploading and attaching your final Work Plan and Budget Narrative. While filling out the application package, be sure to save frequently by clicking the Save button on the cover page of the application package.
- j) Click the Check Package for Errors button to ensure all of the required portions of the application package are complete. Address any errors that are identified before submitting.
- k) Click the Save & Submit button after completing the application package. The Save & Submit button will not be functional until the application is properly completed with no errors and saved.

## VIII. SCOPE OF WORK

Title VII, Subtitle G, Section 793 of the Diesel Emissions Reduction Program (DERA) allows states to use funds provided under the State Clean Diesel Grant Program to develop and implement such grant, rebate and low-cost revolving loan programs in the state as are appropriate to meet state needs and goals relating to the reduction of diesel emissions, subject to the following eligibility limitations and funding priorities.

**A. Project and Budget Period:** FY 2017 funds will be dispersed as new awards which have project and budget periods of October 1, 2017 to September 30, 2018.

**B. Eligible Diesel Vehicles, Engines and Equipment:** Projects may include, but are not limited to, diesel emission reduction solutions from the following heavy-duty diesel emission source types:

1. Buses<sup>a,b</sup>;
2. Medium-duty or heavy-duty trucks<sup>c</sup>;
3. Marine Engines;
4. Locomotives; and
5. Nonroad engines, equipment or vehicles used in:
  - a) Construction;
  - b) Handling of cargo (including at a port or airport);
  - c) Agriculture;
  - d) Mining; or
  - e) Energy production (including stationary generators and pumps).

**C. Eligible Diesel Emission Reduction Solutions:** Projects must include one or more of the following diesel emission reduction solutions that utilize a certified engine configuration and/or a verified technology.

A “retrofit” project is defined broadly to include any technology, device, fuel or system that, when applied to an existing diesel engine, achieves emission reductions beyond what is currently required by EPA regulations at the time of the engine’s certification. Additional information about the diesel emission reduction solutions listed below, as well as technical tips and important points to consider, is available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100CVIS.pdf>.

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<sup>a</sup> For the purposes of the Program, buses include school buses of Type A, B, C and D. To be eligible as a school bus a vehicle should meet the definition of a school bus as defined by the National Highway Transportation Safety Administration. This definition includes, but is not limited to: 1) A bus that is used for purposes that included carrying students to and from school or related events on a regular basis; 2) Be identified with the words “School Bus”; and 3) Be painted National School Bus Glossy Yellow.

<sup>b</sup> For the purposes of the Program, buses include and medium and heavy-duty transit buses (see footnote c, below).

<sup>c</sup> For the purposes of the Program, medium heavy-duty and heavy heavy-duty highway vehicles are defined as Class 5 through Class 8: Class 5 (16,001 -19,500 lbs GVWR); Class 6 (19,501 - 26,000 lbs GVWR); Class 7 (26,001 - 33,000 lbs GVWR); Class 8a (33,001 - 60,000 lbs GVWR); Class 8b (60,001 lbs GVWR and over).

- 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). The state may fund up to 100% of the cost (labor and equipment) for an eligible verified emission control. EPA suggests that each applicant requesting diesel particulate filters data log the exhaust temperature of all vehicles to be considered before the application is submitted, so that there is evidence that the fleets can accommodate the technology.

A list of eligible, EPA verified exhaust control technologies is available at: [www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel](http://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: [www.arb.ca.gov/diesel/verde/vt/cvt.htm](http://www.arb.ca.gov/diesel/verde/vt/cvt.htm). The types (e.g., DOC, DPF, etc.) of exhaust control technologies proposed for funding under this category must exist on one of these lists for the specific vehicle/engine application specified in the proposal at the time of proposal submission to EPA. If selected for funding, the actual exhaust control technologies used by the grant recipient must be specifically named on EPA or CARB's Verified Exhaust Control Technologies lists at the time of acquisition, and used only for the vehicle/engine applications specified on the list, to be eligible for funding.

- 2. Engine Upgrades and Remanufacture Systems:** 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 can 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 can 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 emissions 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 to demonstrate that the upgrade will result in a significant emissions benefit.

The state may fund up to 40% of the cost (labor and equipment) of an eligible nonroad, locomotive or marine engine upgrade. 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 a significant 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 funding restrictions in Section IX.I (Fleet Expansion) will apply. If a certified remanufacture system is applied at the time of rebuild, funds under this award cannot be used for the entire cost of the engine rebuild, but only for the cost of the certified remanufacture system and associated labor costs for installation.

A list of eligible, EPA verified engine upgrade technologies is available at: [www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel](http://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel). Lists of certified remanufacture systems for locomotives and marine engines are available at: [www.epa.gov/compliance-and-fuel-economy-data/engine-certification-data](http://www.epa.gov/compliance-and-fuel-economy-data/engine-certification-data), and additional information on remanufacture systems, are available at: [www.epa.gov/vehicle-and-engine-certification/remanufacture-systems-category-1-and-2-marine-diesel-engines](http://www.epa.gov/vehicle-and-engine-certification/remanufacture-systems-category-1-and-2-marine-diesel-engines). The actual engine upgrades or remanufacture systems used by the grant recipient must be specifically named on EPA's list of certified remanufacture systems or EPA or CARB's Verified Exhaust Control Technologies lists at the time of acquisition, and used only for the vehicle/engine applications specified on the lists, to be eligible for funding.

3. **Cleaner Fuels Use:** Cleaner fuels include, but are not limited to, biodiesel and other certified alternative fuels. The state may not fund stand-alone cleaner fuel use. For new or expanded use of a cleaner fuel, this funding can cover the cost differential between the cleaner fuel and conventional diesel fuel if that cleaner fuel is used in combination, and on the same vehicle, with a new eligible verified exhaust control or an eligible engine upgrade or an eligible certified engine replacement or an eligible certified vehicle/equipment replacement funded under this program, as described in this Section.
4. **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. The reduction in idling will conserve diesel fuel and must also lower emissions.

Lists of eligible, EPA verified idle reduction technologies are available at: [www.epa.gov/verified-diesel-tech/smartway-technology](http://www.epa.gov/verified-diesel-tech/smartway-technology). 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. The actual idle reduction technologies used 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, to be eligible for funding.

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 may be eligible as an engine replacement (Section VIII.C.6 below) or a vehicle/equipment replacement (Section VIII.C.7, below).

- a) **Verified Idle Reduction Technologies on Locomotives:** The state may fund up to 40% of the cost (labor and equipment) of eligible verified idle reduction technologies on locomotives.

**b) Electrified Parking Spaces:** Electrified Parking Spaces ((EPS), also known as Truck Stop Electrification (TSE)) operates independent of the truck's engine and allows the truck engine to be turned off as the EPS system supplies heating, cooling, and/or electrical power. The EPS system provides off-board electrical power to operate either:

- an independent heating, cooling, and electrical power system, or
- a truck-integrated heating and cooling system, or
- a plug-in refrigeration system that would otherwise be powered by an engine.

The state may fund up to 30% of the cost (labor and equipment) of eligible electrified parking space technologies, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. Examples of eligible 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. Examples of ineligible costs for 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.

**c) 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. The state may fund up to 25% of the cost (labor and equipment) of eligible marine shore power connection systems, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. Examples of 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. Funding may support new installations, or expansions of existing shore power systems. Examples of 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. Due to the unique nature and custom design of marine shore power connection systems, EPA will review and approve the marine shore power connection system proposed by the state on a case-by-case basis.

- i. Marine Shore Power Criteria:** Projects are eligible for funding on the condition that the following criteria are satisfied:
- 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).
  - Shore power connection systems must be supplied with electricity from the local utility grid.

- 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 cost/benefits.
  - If the project proposal is selected for funding, the final design of the marine shore power connection system will require specific EPA approval prior to purchase and installation.
  - Applicants must commit to reporting usage information to EPA for five years after the system is operational.
  - 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.
- ii. **Marine Shore Power Project Description:** Applicants proposing marine shore power connection systems should provide a project description that includes, but is not limited to:
- the annual number of ship visits to berth where the shore power system is to be installed;
  - average hoteling (or idling) time per visit; and
  - information about the fleet of vessels that has, or will have, the ability to use the shore-side connection system, including:
    - the estimated annual number of ship visits to the shore power enabled berth that will utilize the shore power system;
    - estimated annual hoteling hours using shore power system;
    - fuel type and average sulfur content of fuel used in the auxiliary engines for each vessel;
    - auxiliary engine and boiler information for each vessel;
    - estimated annual hoteling load requirements (MW-hours);
  - 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
  - estimated emission reductions based on the methodology in Appendix C.

**d) Highway Idle Reduction Technologies:** The state may fund up to 25% of the cost (labor and equipment) of eligible, verified idle reduction technologies on long-haul trucks and school buses.

**5. 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.

A list of eligible, EPA verified aerodynamic technologies is available at:

[www.epa.gov/verified-diesel-tech/smartway-verified-list-aerodynamic-devices](http://www.epa.gov/verified-diesel-tech/smartway-verified-list-aerodynamic-devices), and includes:

- a) gap fairings that reduce the gap between the tractor and the trailer to reduce turbulence;
- b) trailer side skirts that minimize wind under the trailer; and

- c) 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: [www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-lrr-new-and-retread-tire](http://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 program. The 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, to be eligible for funding.

The state cannot fund stand-alone aerodynamic technologies or low rolling resistance tires. The state may 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, if combined on the same vehicle with the new installation of one or more of the Verified Exhaust Controls funded under this program, as described in Section VIII.C.1, above.

Note: Low rolling resistance tires are not eligible for funding where these types of tires have already been installed on the truck.

- 6. Certified Engine Replacement:** Engine Replacement 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<sup>d</sup>), and/or diesel engine replacement with an electric generator(s) (genset). All-electric (i.e., zero emission) engine replacements do not require EPA or CARB certification.

The eligible cost of engine replacement 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 replacement 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. Examples of ineligible engine replacement costs include, but are not limited to: tires, cabs, axles, paint, brakes, and mufflers. For engine replacement with battery, fuel cell, and grid electric, examples of eligible engine replacement 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. Examples of ineligible costs include, but are not limited to, electricity, and operation and maintenance costs.

- a) Locomotive, Marine, and Nonroad Diesel Vehicles and Equipment:

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<sup>d</sup> Hydrogen fuel cells are only eligible for engine replacements for eligible urban transit buses as defined in the program and eligible drayage trucks as defined in this program.

- i. The state may fund up to 40% of the cost (labor and equipment) of replacing a diesel engine with a 2017 model year or newer engine certified to EPA emission standards. Previous engine model year engines may be used if the engine is certified to the same emission standards applicable to the engine in EMY 2017. Nonroad, locomotive, and marine engine emission standards are on EPA's website at: [www.epa.gov/emission-standards-reference-guide/epa-emission-standards-nonroad-engines-and-vehicles](http://www.epa.gov/emission-standards-reference-guide/epa-emission-standards-nonroad-engines-and-vehicles).
- ii. The state may fund up to 60% of the cost (labor and equipment) of replacing a diesel engine with an electric motor or electric power source.

**b) Highway Diesel Vehicles:**

- i. The state may fund up to 40% of the cost (labor and equipment) of replacing a diesel engine with a 2017 model year or newer engine certified to EPA emission standards. Highway engine emission standards are on EPA's website at: [www.epa.gov/emission-standards-reference-guide/epa-emission-standards-heavy-duty-highway-engines-and-vehicles](http://www.epa.gov/emission-standards-reference-guide/epa-emission-standards-heavy-duty-highway-engines-and-vehicles).
- ii. The state may fund up to 50% of the cost (labor and equipment) of replacing a diesel engine with a 2017 model year or newer engine that is certified to CARB's Optional Low-NOx Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NOx. Engines certified to CARB's Optional Low NOx Standards 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).
- iii. The state may fund up to 60% of the cost (labor and equipment) of replacing a diesel engine with an electric motor or an electric power source.

**7. Vehicle and Equipment Replacements:** Nonroad and highway diesel vehicles and equipment can be replaced under this program 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 emission standards. Replacement includes, but is not limited to, diesel vehicle/equipment replacement with newer, cleaner diesel, electric (grid, battery or fuel cell<sup>e</sup>), hybrid or alternative fuel vehicles/equipment. All-electric (i.e. zero emission) vehicles and equipment do not require EPA or CARB certification. Marine vessels are not eligible for full vessel replacement.

The eligible cost of a vehicle/equipment 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. 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.

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<sup>e</sup> Hydrogen fuel cell vehicles and equipment are only eligible as replacements for eligible transit buses, drayage trucks, and forklifts, as defined in this program.



- a) Locomotives and Nonroad Diesel Vehicles and Equipment:
- i. The state may fund up to 25% of the cost of a replacement vehicle or piece of equipment powered by a 2017 model year or newer engine certified to EPA emission standards. Previous engine model year engines may be used if the engine is certified to the same emission standards applicable to EMY 2017. Nonroad and locomotive engine emission standards are on EPA's website at: [www.epa.gov/emission-standards-reference-guide/epa-emission-standards-nonroad-engines-and-vehicles](http://www.epa.gov/emission-standards-reference-guide/epa-emission-standards-nonroad-engines-and-vehicles).
  - ii. The state may fund up to 45% of the cost of a new, all-electric nonroad vehicle or piece of equipment.
- b) Highway Diesel Vehicles and Buses (other than Drayage):
- i. The state may fund up to 25% of the cost of a replacement vehicle powered by a 2017 model year or newer engine certified to EPA emission standards. Highway engine emission standards are on EPA's website at: [www.epa.gov/emission-standards-reference-guide/epa-emission-standards-heavy-duty-highway-engines-and-vehicles](http://www.epa.gov/emission-standards-reference-guide/epa-emission-standards-heavy-duty-highway-engines-and-vehicles).
  - ii. The state may fund up to 35% of the cost of a replacement vehicle powered by a 2017 model year or newer engine certified to meet CARB's Optional Low-NOx Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NOx. Engines certified to CARB's Optional Low NOx Standards 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).
  - iii. The state may fund up to 45% of the cost of an all-electric replacement vehicle.
- c) Drayage Vehicles: The state may fund up to 50% of the cost of a replacement drayage truck powered by a 2012 model year or newer certified engine.
- i. Definition of Drayage Truck: A "Drayage Truck" means any Class 8 (GVWR greater than 33,000) highway vehicle 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.
  - ii. Drayage Operating Guidelines: 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 above. For an example of sample guidelines, see <https://www.epa.gov/cleandiesel/clean-diesel-state-allocations>.
  - iii. Required/Scheduled Maintenance: EPA will fund the required/scheduled vehicle maintenance, as specified in the owner's manual, which is necessary to meet the warranty requirements for diesel particulate filters installed on drayage trucks. Funding for required maintenance is available for the duration of the project period.

**D. DERA Programmatic Priorities:** The principal objective of the assistance to be awarded under this program is to achieve significant reductions in diesel emissions in terms of tons of pollution produced and reductions in diesel emissions exposure from vehicles, engines and equipment

operating in areas designated as poor air quality areas. The state's workplan must discuss how the state will ensure that projects selected for funding support the programmatic priorities listed below. Please note that these are funding priorities, and are not eligibility factors.

The term "project location" 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. A list of priority counties and areas can be found at: [www.epa.gov/cleandiesel/clean-diesel-state-allocations](http://www.epa.gov/cleandiesel/clean-diesel-state-allocations). These counties and areas were identified as priority locations for the DERA program because they are:

- in nonattainment or maintenance of national ambient air quality standards for Ozone and/or PM<sub>2.5</sub>;
- areas with toxic air pollutant concerns as identified from the National Air Toxics Assessment data;
- designated as Federal Class I areas; and/or
- accepted to participate in EPA's Ozone Advance or PM Advance Programs.

In addition, priority should be given to projects located in areas that receive a disproportionate quantity of air pollution from diesel fleets, including:

- truck stops (e.g. places especially for truckers that are usually by a highway or interstate and that include a parking area, fueling services, and other facilities)
- ports (e.g. 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; places where foreign goods are inspected by customs officers and allowed to pass into and out of a country)
- rail yards (e.g. places at which trains originate or terminate, or at which they are distributed or combined)
- terminals (e.g. freight or passenger stations at the end of carrier lines, or that serve as junctions at any point with other lines, that have facilities for the handling of freight and passengers)
- construction sites (e.g. sites of ongoing large scale commercial, industrial, or heavy civil construction)
- school bus depots/yards (e.g. parking areas and/or garages where school buses are stored and maintained, or where school buses queue), distribution centers (e.g. 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)

## **E. EPA Strategic Plan Linkage and Anticipated Outputs/Outcomes**

Pursuant to Section 6a of EPA Order 5700.7, "Environmental Results under EPA Assistance Agreements," EPA must link proposed assistance agreements with the Agency's Strategic Plan. EPA also requires that grant applicants and recipients adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7,

Environmental Results under Assistance Agreements, [www.epa.gov/sites/production/files/2015-03/documents/epa\\_order\\_5700\\_7a1.pdf](http://www.epa.gov/sites/production/files/2015-03/documents/epa_order_5700_7a1.pdf)).

- 1. Linkage to EPA Strategic Plan:** All proposals must support progress towards EPA's 2014-2018 Strategic Plan Goal 1, 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." Specifically, the proposed activities must reduce emissions from diesel fleets, thereby reducing local and regional air pollution of criteria pollutants and air toxics.

Please read [EPA's FY 2014-2018 Strategic Plan](#) for more information.

- 2. Outputs:** The term "output" means an environmental activity, effort and/or associated work product related to an environmental goal and objective that will be produced or provided over a period of time or by a specified date. Outputs may be quantitative or qualitative but must be measurable during an assistance agreement funding period.

Expected outputs from the projects to be funded under this Program include, but are not limited to:

- number of replaced or retrofitted engines/vehicles/equipment; and/or
- hours of idling reduced.

Other potential outputs may include, but are not limited to:

- engaging local communities with respect to the design and performance of the project;
- the project's inclusion in a broader-based environmental or air quality plan;
- the implementation of contract specifications requiring the use of cleaner vehicles and equipment;
- a documented commitment to continue to identify and address air quality issues in the affected community;
- adoption of an idle reduction policy;
- providing support to clean diesel coalitions by sharing information, working with interested fleets, and addressing specific geographic needs;
- number of subawards; and/or
- dissemination of project/technology information via list serves, websites, journals and outreach events.

Progress reports and a final report will also be required outputs.

- 3. Outcomes:** The term "outcome" means the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be qualitative and environmental, behavioral, health-related or programmatic in nature, but must also be quantitative. They may not necessarily be achievable within an assistance agreement funding period.

Expected outcomes from the projects to be funded under this Program include, but are not limited to:

- Tons of pollution reduced over the lifetime of the vehicles/engines/equipment, specifically:
  - fine particulate matter (PM<sub>2.5</sub>),
  - nitrogen oxides (NO<sub>x</sub>),
  - carbon monoxide (CO) and/or carbon dioxide (CO<sub>2</sub>),
  - volatile organic compounds (VOCs).
- net reduction in gallons of diesel fuel used;
- benefits to the communities affected by the project, including improvements to human health and the environment, the local economy, social conditions, and the welfare of residents in such communities.

Other potential outcomes may include, but are not limited to:

- community engagement and partnership;
- improved ambient air quality;
- health benefits achieved;
- changes in driver behavior regarding idling practices;
- an increased understanding of the environmental or economic effectiveness of the implemented technology;
- increased public awareness of project and results;
- widespread adoption of the implemented technology;
- demonstration and deployment of zero and near-zero emission vehicles and engines; and
- emission reductions along freight transportation corridors.

## **IX. USE OF FUNDS RESTRICTIONS**

**A. Federal Matching Funds:** No funds awarded under the Program shall be used for matching funds for other federal grants unless expressly authorized by statute. Likewise, recipient may not use federal funds as matching or cost-share funds for the State Clean Diesel Grant Program, including funds received under EPA's National Clean Diesel Emissions Reduction Programs and federal Supplemental Environmental Project (SEP) funds.

**B. Administrative Costs Expense Cap:** No more than 15 percent of the state's total project costs may be used to cover administrative type costs (e.g. personnel, benefits, travel, and office supplies). Total project costs include the federal share as well as any cost-share provided by the state. However, Regions have the discretion to allow state matching funds to exceed the 15% cap if the state provides justification for unique circumstances. The state's indirect costs are not considered as administrative type costs and do not count towards the 15 percent maximum.

**C. Expenses Incurred Prior to the Project Period:** Except for eligible pre-award costs as defined in 2 CFR §200.458 and as authorized by 2 CFR §200.309 and 2 CFR §1500.8, no funds awarded under the Program shall be used to cover expenses incurred prior to the project period set forth in any assistance agreement funded under the Program. Additionally, except for eligible pre-award

costs as defined above, expenses incurred prior to the project period set forth in any assistance agreement funded under the Program are not eligible as a cost-share.

- D. Formerly Verified Technologies:** No funds awarded under the Program shall be used for retrofit technologies on EPA's or CARB's, "Formerly Verified Technologies" lists. EPA's formerly verified list can be found at: [www.epa.gov/verified-diesel-tech/list-formerly-verified-technologies-clean-diesel](http://www.epa.gov/verified-diesel-tech/list-formerly-verified-technologies-clean-diesel), and CARB's formerly verified lists can be found at: [www.arb.ca.gov/diesel/verdev/vt/fv1.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv1.htm), [www.arb.ca.gov/diesel/verdev/vt/fv2.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv2.htm), and [www.arb.ca.gov/diesel/verdev/vt/fv3.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv3.htm).
- E. Emissions Testing:** No funds awarded under the Program shall be used for emissions testing and/or air monitoring activities (including the acquisition cost of emissions testing equipment), or research and development.
- F. Fueling Infrastructure:** No funds awarded under the Program shall be used for fueling infrastructure, such as that used for the production and/or distribution of biodiesel, compressed natural gas, liquefied natural gas, and or other fuels.
- G. Mandated Measures:** Pursuant to 42 U.S.C. 16132(d)(2), no funds awarded under the Program shall be used to fund the costs of emission reductions that are mandated under federal law. 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 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.

Specifically, projects involving locomotives and marine engines are not eligible for funding if the emission reductions are 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 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). Projects which include locomotives and/or marine engines and/or stationary engines must provide the state and EPA a clear and concise justification for why/how the proposed emission reduction are not subject to the Restriction for Mandated Measures. The justification must clearly demonstrate that:

- the target engines are exempt from any federal requirements; or
- emission reductions funded under the Program will be implemented prior to the effective date of any applicable federal requirements; and/or
- emission reductions funded under the Program 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.

Sufficient information must be provided to support the justification, including maintenance records, if applicable.

- H. Normal Attrition:** Engine, vehicle, and equipment 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 program. Normal attrition is generally defined as a replacement 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. For 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 service remaining (as defined by the fleet's retirement schedule) is eligible for replacement. Normal attrition does not include replacements that must occur due to a state or Local mandate.
- I. Fleet Expansion:** No funds awarded under the Program may be used for the purchase of vehicles, engines, or equipment to expand a fleet. Engine, vehicle, and equipment replacement projects are eligible for funding on the condition that the following criteria are satisfied:
1. The replacement vehicle, engine, or equipment will continue to perform the same function and operation as the vehicle, engine, or equipment that is being replaced.
  2. The replacement vehicle, engine, or equipment will be of the same type and similar gross vehicle weight rating or horsepower as the vehicle, engine, or equipment being replaced.
    - a) Nonroad: Horsepower increases of more than 25 percent will require specific approval by EPA prior to purchase, and the applicant may be required to pay the additional costs associated with the higher horsepower equipment.
    - b) Highway: The engine's primary intended service class must match the vehicle's weight class (i.e. a LHD diesel engine is used in a vehicle with GVWR 16,001 – 19,500 pounds, a 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 EPA approval prior to purchase.
  3. The vehicle, equipment, and/or engine being replaced must be scrapped or rendered permanently disabled within ninety (90) days of being replaced.
    - a) If a Tier 3 nonroad vehicle, equipment and/or engine is replaced, the Tier 3 unit may be retained or sold if the Tier 3 unit will replace a similar Tier 2 or lower nonroad unit, and the Tier 2 or lower nonroad unit will be scrapped. The scrapped unit must currently be in service, operate more than 500 hours per year, and have a similar usage profile as the replaced unit. It is preferred that the scrapped unit currently operates within the same project location(s) as the Tier 3 unit currently operates, however alternative scenarios will be considered. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior EPA approval.
    - b) Cutting a three-inch by three-inch hole in the engine block (the part of the engine containing the cylinders) is the preferred scrapping method. Other acceptable scrappage methods may be considered and will require prior EPA approval.

- c) Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrappage methods may be considered and will require prior written approval from the EPA Project Officer.
- d) Evidence of appropriate disposal (such as digital photos of the engine tag showing serial number, engine family number, and engine model year, and of the destroyed engine block and cut frame rails or other structural components) is required in a final assistance agreement report submitted to EPA.
- e) 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 engines, vehicles, equipment, or parts are to be sold, program income requirements apply.
- f) For tire replacement projects, the original tires should be scrapped according to local or state requirements, or the tires can be salvaged for reuse or retreading. If salvaged tires are sold, program income requirements apply.

**J. Single-Wide Wheels:** No funds awarded under the Program shall be used for the purchase of single-wide wheels except where a fleet is retrofitting from standard dual tires to SmartWay-verified single-wide low rolling resistance tires. In this case, the cost of single-wide wheels would be acceptable as additional equipment necessary to use the SmartWay verified technology.

**K. Auxiliary Power Units:** No funds awarded under the Program shall be used for the purchase of APUs or generators for vehicles with engine model year 2007 or newer.

**L. Replacement Technologies:** No funds awarded under the Program shall be used for the purchase of exhaust controls, idle reduction technologies, low rolling resistance tires or advanced aerodynamic technologies if similar technologies have previously been installed on the truck or trailer.

**M. Highway Model Year:** No funds awarded under the Program shall be used to retrofit (including idle reduction technologies and aerodynamics and tires) or replace a transit bus, medium-duty, or heavy-duty highway vehicle with engine model year 1994 and older or 2010 and newer, or to retrofit engine model year 2007 and newer with DOCs or DPFs, or retrofit engine model year 2010 and newer with SCR, or replace engine model year 2007-2009 with other than all-electric (zero-emission). Refer to Table 1 for further explanation.

**Table 1: Medium and Heavy-Duty Trucks, Transit Buses, and School Buses Funding Restrictions**

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Verified Idle Reduction	Vehicle or Engine Replacement: EMY 2017+ (2012+ for Drayage)	Vehicle or Engine Replacement: Electric
	+/- Tires and Aerodynamics					
older - 1994	No	No	No	No	No	No
1995 - 2006	Yes	Yes	Yes	Yes	Yes	Yes
2007 to 2009	No	No	Yes	Yes*	No	Yes
2010 - newer	No	No	No	No	No	No

\* Auxiliary Power Units and generators are not eligible on vehicles with EMY 2007 or newer.

**N. Nonroad Operating Hours:** No funds awarded under the Program shall be used to retrofit, replace or upgrade or replace a nonroad engine operates less than 500 hours per year.

**O. Nonroad Model Year and Tier:** No funds awarded under the Program shall be used to retrofit, upgrade or replace a nonroad engine that is 50 HP or less and engine model year 2004 or older, or between 51-300 HP and engine model year 1994 or older, or 301 HP or greater and engine model year 1984 or older. Refer to Table 2 for further explanation.

- 1) Equipment and Vehicle Replacement: No funds awarded under this RFP shall be used to replace nonroad vehicles and equipment with vehicles/equipment powered by unregulated, Tier 1, or Tier 2 engines. Tier 3 and Tier 4 interim (4i) engines are allowed for vehicle/equipment replacement only when Tier 4 final is not yet available from OEM for 2017 model year equipment under the Transition Program for Equipment Manufacturers (TPEM).
- 2) Engine Replacement: No funds awarded under this RFP shall be used to replace nonroad engines with Tier 3 or lower engines.



**Table 2. Nonroad Engine Funding Restrictions**

Current Engine Horsepower	Current Engine Model Year (EMY) and Tier	Vehicle/Equipment Replacement: EMY 2017+				Verified Exhaust Control
		Tier 0 - 2	Tier 3 - 4i	Tier 4	All-Electric	
0-50	2005 and Newer; Unregulated – Tier 2	No	No	Yes	Yes	Yes
51-300	1995 and Newer; Tier 0 – Tier 2	No	Yes*	Yes	Yes	Yes
51-300	1995 and Newer; Tier 3	No	No	Yes	Yes	Yes
301+	1985 and Newer; Tier 0 – Tier 2	No	Yes*	Yes	Yes	Yes
301+	1985 and Newer; Tier 3	No	No	Yes	Yes	Yes
Current Engine Horsepower	Current Engine Model Year (EMY) and Tier*	Engine Replacement: EMY 2017+*			Verified Engine Upgrade	
		Tier 0 - 3	Tier 4	All-Electric		
0-50	2005 and Newer; Unregulated – Tier 2	No	Yes	Yes	Yes	
51-300	1995 and Newer; Tier 0 – Tier 3	No	Yes	Yes	Yes	
301-750	1985 and Newer; Tier 0 – Tier 3	No	Yes	Yes	Yes	
751+	1985 and Newer; Tier 0 – Tier 2	No	Yes	Yes	Yes	

\*Tier 3 and Tier 4 interim (4i) allowed for vehicle/equipment replacement only when Tier 4 final is not yet available from OEM for 2017 model year equipment under the Transition Program for Equipment Manufacturers (TPEM).

\*\*Previous engine model year engines may be used for engine replacement if the engine is certified to the same emission standards applicable to EMY 2017.

**P. Locomotive and Marine Operating Hours:** No funds awarded under the Program shall be used to retrofit, replace, upgrade or install idle reduction technologies on eligible locomotives or marine engines that operate less than 1000 hours per year.

**Q. Marine Engine Tier:** No funds awarded under the Program shall be used to replace or upgrade Tier 3 or Tier 4 marine engines, or to replace marine engines with a Tier 2 or lower marine engine. Refer to Table 3 for further explanation.

**Table 3: Marine Engines Funding Restrictions**

Current Engine Tier	Engine Replacement: EMY 2017+ *			Certified Remanufacture System	Verified Engine Upgrade
	Tier 1-2	Tier 3-4	All-Electric		
Unregulated – Tier 2	No	Yes	Yes	Yes	Yes
Tier 3 - 4	No	No	No	No	No

\*Previous engine model year engines may be used if the engine is certified to the same emission standards applicable to EMY 2017.

**R. Marine Shore Connection:** No funds awarded under the Program shall be used for marine shore connection system projects that are expected to be utilized less than 1,000 MW-hr/year.

**S. Locomotive Tier:** No funds awarded under the Program shall be used replace any locomotive engine with a Tier 3 or lower engine. No funds awarded under the Program shall be used to replace Tier 2+ line-haul locomotive engines. No funds awarded under the Program shall be used to install Automatic Engine Start-Stop technologies on locomotives currently certified to Tier 0+ or higher. Refer to Table 4 for further explanation.

**Table 4: Locomotive Engines Funding Restrictions**

Current Locomotive Tier	Locomotive Replacement or Engine Replacement: EMY 2017+* or Electric			Verified Exhaust Control	Idle-Reduction Technology	Certified Remanufacture System
	Tier 0+ - 3	Tier 4	All-Electric			
Unregulated - Tier 2	No	Yes	Yes	Yes	Yes**	Yes
Tier 2+ switcher	No	Yes	Yes	Yes	Yes**	Yes
Tier 2+ line haul	No	No	No	Yes	Yes**	Yes
Tier 3 – Tier 4	No	No	No	No	No	No

\*Previous engine model year engines may be used if the engine is certified to the same emission standards applicable to EMY 2017.

\*\*Automatic Engine Start-Stop technologies are only eligible to be installed on locomotives currently certified to Tier 0 or unregulated.

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.

**T. Locomotive Shore Connection:** No funds awarded under the Program shall be used for locomotive shore connection system projects that are expected to be utilized less than 1,000 hours/year.

**X. MANDATORY COST-SHARE REQUIREMENTS**

Projects involving engine upgrades, certain idle reduction technologies, shore connection systems, electrified parking space technologies, certified engine replacements, or certified vehicle/equipment replacements, as defined in Section VIII.C, are subject to the DERA Funding Limits and mandatory cost-share requirements shown below in Table 5.

The “DERA Funding Limits” (percentages) shown below represent the maximum portion of the equipment costs (parts and labor) that can be covered with a combination of DERA funds and any non-federal voluntary matching funds provided by the state. The portion of the costs that exceed the DERA Funding Limit is referred to as the “mandatory cost-share.” Meeting the mandatory cost-share is ultimately the responsibility of the grantee, however the mandatory cost-share is typically provided by project partners (e.g., fleet owners). As discussed in Section V.B, states may contribute voluntary matching funds to the project to qualify for the matching incentive. In addition to a voluntary match provided by a state to receive the EPA matching incentive, a state may contribute a larger voluntary match in order to achieve additional diesel emission reductions under their State Clean Diesel Program grant. Mandatory cost-share funds provided by the state and/or third parties cannot count towards the state’s voluntary matching funds to qualify for the matching incentive.

**Table 5. DERA Funding Limits and Mandatory Cost-Share Requirements**

<b>DERA Eligible Activities</b>	<b>DERA Funding Limits (DERA Funds + Voluntary Match)</b>	<b>Minimum Mandatory Cost-Share (Fleet Owner Contribution)</b>
Exhaust Control Retrofit	100%	0%
Engine Upgrade / Remanufacture	40%	60%
Highway Idle Reduction	25%	75%
Locomotive Idle Reduction	40%	60%
Marine Shore Power	25%	75%
Electrified Parking Space	30%	70%
Engine Replacement – Diesel or Alternative Fuel	40%	60%
Engine Replacement – Low NOx	50%	50%
Engine Replacement – All-Electric	60%	40%
Vehicle/Equipment Replacement – Diesel or Alternative Fuel	25%	75%
Vehicle/Equipment Replacement – Low NOx	35%	65%
Vehicle/Equipment Replacement – All-Electric	45%	55%

## **XI. WAIVER OF PROGRAMMATIC REQUIREMENTS**

EPA will consider, on a case-by-case basis, waiver requests from programmatic requirements. Waivers will only be approved for non-statutory and/or non-regulatory requirements. Sufficient justification for the waiver must be provided by the state. States must obtain EPA approval for any waiver request before conducting any work or expending any funds on a project involving a waiver request. Any questions regarding waivers should be directed to the EPA Project Officer.

## **XII. AWARD ADMINISTRATION INFORMATION**

- A. Terms and Conditions:** General administrative and programmatic terms and conditions applicable to EPA assistance agreements under this Program may be viewed at: [www.epa.gov/grants/grant-terms-and-conditions](http://www.epa.gov/grants/grant-terms-and-conditions).
- B. Pass-through Entity:** As defined at 2 CFR §200.74, refers to a non-Federal entity (i.e. the state) that provides a subaward to a subrecipient to carry out part of a Federal program.
- C. Subaward:** As defined at 2 CFR §200.92, means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract. If the recipient chooses to pass funds from this assistance agreement to other entities, the recipient must comply with applicable provisions of 2 CFR Part 200, the National Term and Condition for Subawards, and the EPA Subaward Policy (Grants Policy Issuance 16-01), both of which may be found at [www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients](http://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients).

Subrecipients only receive reimbursement for their actual direct or approved indirect costs such that they do not “profit” from the transaction and subrecipients are subject to the same Federal requirements as the pass-through entity. There is no requirement in the applicable regulations or these guidelines for pass-through entities to compete subawards, but pass-through entities may choose to conduct competition for subawards based on their own policies. Please note that sometimes a pass-through entity or subrecipient may use the term ‘contract’ to characterize a subaward. Therefore, it is important to examine the substance of the agreement to determine if the transaction is a subaward or a procurement contract per the terms and conditions of the EPA assistance agreement.

Recipients must obtain the written approval of EPA’s Award official for any subawards that are not described in the approved work plan in accordance with 2 CFR §200.38 or prior to awarding a subaward to an individual if the EPA-approved work plan does not include a description of subawards to individuals.

- D. Subawards to For-Profit Entities:** A for-profit company may be awarded a subgrant when doing so is consistent with applicable regulations and policies. The EPA Subaward Policy

Section 7(c) states, “For-profit organizations and individual consultants, with very few exceptions, are contractors rather than subrecipients under the standards in 2 CFR §200.330 and EPA’s guidance; they are typically ineligible for subawards from pass-through entities. As provided in the National Term and Condition for Subawards, EPA’s Award Official must approve subawards to these entities on the basis of either a precise description of the subawards in the EPA approved budget and work plan or on a transaction by transaction basis. See Appendix A: Distinctions Between Subrecipients and Contractors for additional guidance.” For example, it would be appropriate to provide a subaward to a private school bus company so that the company may implement a diesel emission reduction school bus replacement program (i.e. the for-profit firm is not providing goods and services to the pass-through entity); it would NOT be appropriate to provide a subaward to a private school bus company so that the company may provide transportation services to the recipient (i.e. the for-profit firm is providing goods and services to the pass-through entity).

**E. Funding to Other State Agencies:** EPA’s general policy, based on the definitions of the terms “Non-federal entity” (2 CFR §200.69), “Pass-through entity” (2 CFR §200.74) “Recipient” (2 CFR §200.86) and “State” (2 CFR §200.90), is that the state itself is the legal entity that receives EPA funds even if one particular component of the state is named in the assistance agreement as the recipient. Transfers of EPA funds between state agencies to perform a particular financial assistance agreement would, therefore, be governed by state law. Additionally, 2 CFR §200.417 “Interagency Services” contemplates situations in which one agency provides services to another agency within the same unit of government as a direct cost of performing the EPA assistance agreement.

If utilizing interagency service agreements between state agencies under 2 CFR §200.417, the expenditures the state agency makes to carry out the Interagency Service Agreement should be shown in the corresponding direct cost categories (Personnel, Travel, Contractual etc.). If state law characterizes agreements under which one state agency provides services to another state agency as a procurement contract, then the costs would be placed in the contractual category. In interagency service situations, 2 CFR §200.417 provides the state may charge a pro-rated share of indirect costs for the service, or 10% of the “. . .direct salary and wage cost of providing the service (excluding overtime, shift premiums, and fringe benefits) may be used in lieu of determining the actual indirect costs of the service.” Centralized services included in central service cost allocation plans subject to Appendix V of 2 CFR Part 200 are accounted for separately.

There may be situations in which state law provides that state agencies or instrumentalities are legally separate for the purposes of financial transactions between them or when state financial management policies for Federal assistance agreements require separate instruments for accounting purposes (e.g. due to differences in indirect cost rates). In those situations, a state may characterize funding transfers as subawards. Note, however, that if one state agency provides a subaward to another state agency the state agency acting as the pass-through entity must comply with applicable provisions of 2 CFR Part 200 (including 2 CFR §200.331), the National Term and Condition for Subawards, and the EPA Subaward Policy unless EPA

provides an exception. The aggregate cost estimates for subawards to other state agencies or instrumentalities should be included as line items in the “Other” budget category.

- F. In-Kind Assistance:** The state may purchase equipment through blanket purchase agreements or some other mechanism that ensures a low price for the item. The state may then provide the equipment in lieu of money as in-kind assistance through a subaward.
- G. Rebates:** Recipients and subrecipients may implement rebate programs and issue rebates to program beneficiaries (who are not employees, contractors, or subrecipients of the pass-through entity) that purchase eligible equipment and/or vehicles as described in Section VIII of this program guide, and not exceeding the “EPA funds and state voluntary matching funds” share of costs as defined in Section X of this document. Rebates should be classified as participant support costs rather than subawards as required by 2 CFR § 200.75 and 2 CFR §200.92 and included as line items in the “Other” budget category.
- H. Contract:** As defined at 2 CFR §200.22, means a legal instrument by which a non-Federal entity purchases property or services needed to carry out the project or program under a Federal award. The term as used in this part does not include a legal instrument, even if the non-Federal entity considers it a contract, when the substance of the transaction meets the definition of a Federal award or subaward (see §200.92 Subaward).
- I. Procurements:** When procuring property and services under a Federal award, a state must follow the same policies and procedures it uses for procurements from its non-Federal funds. The state will comply with §200.322 Procurement of Recovered Materials, and ensure that every purchase order or other contract includes any clauses required by section §200.326 Contract provisions. All other non-Federal entities, including subrecipients of a state (other than another state agency), will follow §§200.318 General Procurement Standards through 200.326 Contract Provisions.
- J. Performance Partnership Grants:** Funds awarded under this program are not eligible for inclusion with the state’s Performance Partnership Grants.
- K. State Notification:** Executive Order 12372, Intergovernmental Review of Federal Programs, may be applicable to awards resulting from this announcement. Recipients may be required to provide a copy of their application to their State Point of Contact (SPOC) for review, pursuant to EO 12372. Not all states require such a review. A listing of State Point of Contacts (SPOC) may be viewed at: [https://obamawhitehouse.archives.gov/omb/grants\\_spoc](https://obamawhitehouse.archives.gov/omb/grants_spoc).
- L. Public Notification:** Not later than 60 days after the date of the award of a subaward, rebate, or loan by a state, the state shall publish the following on the Web site of the state:

1. For subawards, rebates, and loans provided to the owner of a diesel vehicle or fleet, the total number and dollar amount of subawards, rebates, or loans provided, as well as a breakdown of the technologies funded through the subgrants, rebates, or loans; and
2. For other subawards, rebates, and loans, a description of each application for which the subaward, rebate, or loan is provided.

**M. Reporting Requirements:** Quarterly programmatic progress reports and a detailed final programmatic report will be required. Additional administrative and financial reporting may be required per the terms and conditions of the award.

1. **Quarterly Reports:** Quarterly reports summarizing technical progress, planned activities for the next quarter and a summary of expenditures are required. The schedule for submission of quarterly reports will be established by EPA, after the grants are awarded. A template for quarterly reports is available at [www.epa.gov/cleandiesel/clean-diesel-state-allocations](http://www.epa.gov/cleandiesel/clean-diesel-state-allocations).
2. **Final Reports:** The final report must include: summary of the project or activity, emissions benefits and other outputs and outcomes achieved, and costs of the project or activity. In addition, the final report shall discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational or technical obstacles to implementing a similar project elsewhere. Award recipients may be provided with additional information and guidance on reporting performance measures and project progress after award. A template for the final report is available at [www.epa.gov/cleandiesel/clean-diesel-state-allocations](http://www.epa.gov/cleandiesel/clean-diesel-state-allocations). The final report shall be submitted to EPA within 90 calendar days of the completion of the period of performance. However, in order to facilitate awarding funds the following fiscal year, it is recommended that the report be completed well before 90 days.