

# 2019 State Clean Diesel Grant Program Information Guide

# 2019 State Clean Diesel Grant Program Information Guide

Transportation and Climate Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency

## **SUMMARY**

EPA's Office of Transportation and Air Quality is soliciting proposals from eligible states and territories for participation in the fiscal year (FY) 2019 Diesel Emission Reduction Program (DERA), State Clean Diesel Grant Program. EPA anticipates approximately \$83 million available for the FY 2019 DERA Programs. In accordance with DERA, EPA makes 30 percent (approximately \$25 million for FY 2019) 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. State Clean Diesel Grant Program funding for FY 2019 will be distributed as a new award rather than a supplemental amendment to prior year funds. In general, states and territories must complete all work on FY 2014-2018 DERA State Program grants by September 30, 2019 to receive FY 2019 funding.

Eligible diesel emissions reduction solutions include verified emissions control technologies such as engine retrofits, 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 2019 State Clean Diesel Grant Program information. 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 2019 State Clean Diesel Grant Program Information Guide, consolidates and streamlines the programmatic requirements applicable to all new and continuing State Clean Diesel Grant Program awards receiving FY 2019 funding. All projects funded with FY 2019 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 2019. 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 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 2019, 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, 2019. A scan of the signed letter must also be emailed to [CleanDiesel@epa.gov](mailto:CleanDiesel@epa.gov).

Andrew Wheeler  
 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 2019 FUNDING SCHEDULE AND PROCEDURES**

**Table 1: FY 2019 Funding Schedule**

Activity	Date
EPA sends all eligible states the FY 2019 Program materials	<b>April 15, 2019</b>
Deadline for all participating states to submit a Notice of Intent to Participate (NOIP) or Notice of Intent to Continue (NOIC) to EPA via email ( <a href="mailto:CleanDiesel@epa.gov">CleanDiesel@epa.gov</a> )	<b>April 29, 2019</b>
EPA will inform the states of their final allocation via email	<b>May 2, 2019</b>
Deadline for states to submit workplans and budget narratives to their EPA Regional Office for review	<b>May 28, 2019</b>
Deadline for participating states to submit their application package to <a href="http://www.Grants.gov">www.Grants.gov</a>	<b>June 18, 2019</b>
Project period for FY 2019 awards begins. Regional offices will finalize the FY 2019 Program awards prior to October 1, 2019.	<b>October 1, 2019</b>
Deadline for FY 2019 projects to be completed	<b>September 30, 2021</b>

**Please note:** This schedule is subject to change and updated guidance will be provided directly to states as needed.

**V. NOTICE OF INTENT**

**A. Notice of Intent to Participate:** States that want to receive FY 2019 State Clean Diesel Grant Program funding must submit a Notice of Intent to Participate (NOIP).

**B. Open FY 2014-2018 State Grants:** In general, any state with an open State Program award from FY 2014 - 2018 must ensure that the project period of the award ends by September 30, 2019, for the state to receive FY 2019 funding. This means that vehicles/equipment should be

delivered, technologies installed, and clean diesel project work completed by September 30, 2019. 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 - 2018 funds by September 30, 2019, the Region can close out the FY 2014 - 2019 awards and de-obligate the remaining funds so that the state can participate in the FY 2019 Program.

Alternatively, if a state with an open Program award from FY 2014 – 2018 is unable to complete all the tasks outlined in the work plan and obligate or expend all FY 2014 – 2018 funds by September 30, 2019, 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 – 2018 Program award may not be able to receive FY 2019 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 2019 workplan.

- C. Voluntary Match Incentive:** The NOIP must indicate if the state intends to voluntarily contribute funding to the FY 2019 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).

- D. 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.

**E. 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 \$83 million available for the FY 2019 DERA Programs. Actual funding is dependent on final Congressional appropriation for FY 2019. In accordance with 42 U.S.C. 16133, subject to the availability of appropriations, EPA makes 30 percent (approximately \$25 million for FY 2019) 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 2019 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 2019, 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.C](#) for additional information on the voluntary match incentive.

**B. Allocation Notification:** After receiving all NOIPs, OTAQ will calculate the final allocations and notify state and territory contacts via e-mail. States and territories must then draft a workplan and budget narrative and send this document to their EPA Region contacts for review. EPA will review the workplan and budget narrative draft and provide comments so that the state or territory can correct any issues prior to submitting the document in their application on [Grants.gov](http://Grants.gov).



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

**A. Content of Application Package:** The application package must include all 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. States should only submit this document on grants.gov after it has been reviewed by their regional EPA DERA contacts.

### **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 hover your cursor over the "Applicants" tab in the horizontal row of blue tabs. A drop-down list will appear.
  - b) Click on "How to Apply for Grants"
  - c) Click on the red button titled, "Search for Opportunity Package," on the right-hand side of the page
  - d) Search by **Funding Opportunity Number: EPA-CEP-01**
  - e) From the list of Opportunity Package(s) currently available, click on the "Apply" link corresponding with CFDA#: **66.040**

- f) Click on the red “Apply” button. You should be prompted to log-in. Follow the on-screen instructions to complete the application submission.
- g) After downloading an application and saving it, you do not need to be online to complete the application
- h) Complete the required forms listed above, including uploading and attaching your final Work Plan and Budget Narrative. **Note:** States and territories should have already received approval on their Work Plan and Budget Narrative from their EPA Region prior to uploading this document in their application. While filling out the application package, be sure to save frequently by clicking the Save button on the cover page of the application package.
- i) Click the Check Package for Errors button to ensure all the required portions of the application package are complete. Address any errors that are identified before submitting.
- j) 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 2019 funds will be dispersed as new awards or supplemental amendments which have project and budget periods of October 1, 2019 to September 30, 2021.

**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;
  - a) Handling of cargo (including at a port or airport);
  - b) Agriculture;
  - c) Mining; or
  - d) 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.

1. **Diesel Engine Retrofit Technologies:** Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include pollution control devices installed in the exhaust system, such as diesel oxidation catalysts (DOCs) and diesel particulate filters (DPFs), or systems that include closed crankcase ventilation (CCV) filtration systems. Older, heavy-duty diesel vehicles that will not be scrapped, retired or replaced for several years are good candidates for retrofits.

This funding can cover up to 100% of the cost (labor and equipment) for an eligible verified diesel engine retrofit technology. The eligible cost of retrofits includes the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional, including related labor expenses. Examples of eligible retrofit costs include, but are not limited to: DPF cleaning machines, spare DPFs for maintenance rotation, replacement CCV filters, mechanic training, and filter cleaning contracts.

A list of eligible, EPA verified diesel engine retrofit 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 diesel engine retrofit technologies is

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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).

available at: [www.arb.ca.gov/diesel/verdev/vt/cvt.htm](http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm). The types (e.g., DOC, DPF, etc.) of retrofits proposed for funding under this category must exist on one of these lists for the specific vehicle/engine application specified in the application at the time of application submission to EPA. If selected for funding, the actual engine retrofit technologies used by the grant recipient must be specifically named on EPA or CARB's Verified Technologies lists at the time of acquisition and used only for the vehicle/engine applications specified on the list, to be eligible for funding. EPA suggests that each applicant requesting diesel particulate filters consult with retrofit suppliers to confirm that the proposed vehicles/engines and their duty-cycles are good candidates for DPFs.

Please see [Section IX. Funding Restrictions](#) for additional information on the eligibility of verified diesel engine retrofit technologies.

- 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 diesel engine retrofits currently verified by EPA or CARB as a package of components demonstrated to achieve specific levels of emissions 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. Applications 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.

Funding can cover 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.G](#) (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). Engine upgrades proposed for funding under this category must exist on one of these lists for the specific vehicle/engine application specified in the application at the time of application

submission to EPA. If selected for funding, the actual engine upgrades used by the grant recipient must be specifically named on EPA's list of certified remanufacture systems or EPA or CARB's Verified Technologies lists at the time of acquisition and used only for the vehicle/engine applications specified on the lists, to be eligible for funding.

Please see [Section IX. Funding Restrictions](#), for additional information on the eligibility of engine upgrades and remanufacture systems.

- 3. Cleaner Fuels and Additives:** Eligible cleaner fuels and additives are limited to those verified by EPA and/or CARB to achieve emissions reductions when applied to an existing diesel engine. EPA will not fund stand-alone cleaner fuel/additive use. For new or expanded use, this funding can cover the cost differential between the cleaner fuel/additive and conventional diesel fuel if that cleaner fuel is used in combination, and on the same vehicle, with a new eligible verified engine retrofit 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.

A list of eligible, EPA-verified cleaner fuels and additives 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, CARB-verified cleaner fuels and additives is available at:

[www.arb.ca.gov/diesel/verde/vt/cvt.htm](http://www.arb.ca.gov/diesel/verde/vt/cvt.htm). The types of fuels and additives (e.g., biodiesel, cetane enhancers) proposed for funding under this category must exist on one of these lists for the specific vehicle/engine application specified in the application and used only for the vehicle/engine applications specified on the list to be eligible for funding.

Please see [Section IX Funding Restrictions](#), for additional information on the eligibility of cleaner fuels and additives.

- 4. 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 types of idle reduction technologies proposed for funding under this category must exist on this list for the vehicle/engine application specified in the application at the time of application submission to EPA. 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.

- a) **Locomotive Idle Reduction Technologies:** Funding can cover up to 40% of the cost (labor and equipment) of eligible verified idle reduction technologies for 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.

Funding can cover 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. This funding can cover 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 applicant 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 application 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 emissions reductions
- d) **Highway Idle Reduction Technologies:** Funding can cover up to 100% of the cost (labor and equipment) for verified idle reduction technologies installed on long haul Class 8 trucks and school buses, if combined on the same vehicle with the new installation of one or more of the Verified Engine Retrofit Technologies funded under this Program, as described in this Section. Funding can cover up to 100% of the cost (labor and equipment) for verified idle reduction technologies installed on long haul Class 8 trucks and school buses with model year 2006 or older engines that have been previously retrofitted with a verified emission control device. Funding can cover up to

25% of the cost (labor and equipment) of stand-alone installations of eligible, verified idle reduction technologies on long-haul trucks and school buses.

Please see [Section IX Funding Restrictions](#), for additional information the eligibility of idle reduction technologies.

- 5. 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 NO<sub>x</sub> 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 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.

EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. Funding can cover 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 Engine Retrofit Technologies funded under this program, as described in this Section.

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

Please see [Section IX Funding Restrictions](#), for additional information the eligibility of aerodynamics and tires.

- 6. Engine Replacement:** Engine Replacement includes, but is not limited to, diesel engine replacement with an engine certified for use with diesel or an alternative fuel (e.g., gasoline, CNG, propane), diesel engine replacement with a zero tailpipe emissions power source (grid,



battery or fuel cell<sup>d</sup>), and/or diesel engine replacement with an electric generator(s) (genset). Zero tailpipe emissions 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:**

- i.** Funding can cover up to 40% of the cost (labor and equipment) of replacing a diesel engine with a 2019 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 2019. 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.** Funding can cover up to 60% of the cost (labor and equipment) of replacing a diesel engine with a zero tailpipe emissions power source.

**b) Highway Diesel Vehicles:**

- i.** Funding can cover up to 40% of the cost (labor and equipment) of replacing a diesel engine with a 2016 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.** Funding can cover up to 50% of the cost (labor and equipment) of replacing a diesel engine with a 2016 model year or newer engine that is certified to CARB's Optional Low-NO<sub>x</sub> Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO<sub>x</sub>. Engines certified to CARB's Optional Low NO<sub>x</sub> 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.** Funding can cover up to 60% of the cost (labor and equipment) of replacing a diesel engine with a zero tailpipe emissions power source.

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

Please see [Section IX Funding Restrictions](#), for additional information on the eligibility of engine replacements.

- 7. Vehicle and Equipment Replacements:** Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels 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, zero tailpipe emission (grid, battery or fuel cell<sup>e</sup>), hybrid or alternative fuel (e.g., gasoline, CNG, propane) vehicles/equipment. Zero tailpipe emissions vehicles and equipment do not require EPA or CARB certification.

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.

- a) Locomotives, Marine Vessels and Nonroad Diesel Vehicles and Equipment:**
- i.** Funding can cover up to 25% of the cost of a replacement locomotive, marine vessel, or nonroad vehicle or piece of equipment powered by a 2019 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 2019. 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.** Funding can cover up to 45% of the cost of a new, zero tailpipe emissions locomotive, marine vessel, or nonroad vehicle or piece of equipment.
- b) Highway Diesel Vehicles and Buses (other than Drayage):**
- i.** Funding can cover up to 25% of the cost of a replacement vehicle powered by a 2016 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.** Funding can cover up to 35% of the cost of a replacement vehicle powered by a 2016 model year or newer engine certified to meet CARB’s Optional Low-NO<sub>x</sub> Standards

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<sup>e</sup> Hydrogen fuel cell vehicles and equipment are only eligible as replacements for eligible transit buses, shuttle buses, drayage trucks, terminal tractors/yard hostlers, stationary generators and forklifts, as defined in this program guide.

of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO<sub>x</sub>. Engines certified to CARB's Optional Low NO<sub>x</sub> 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. Funding can cover up to 45% of the cost of a new, zero tailpipe emissions replacement vehicle.
- c) Drayage Vehicles: Funding can cover up to 50% of the cost of a replacement drayage truck powered by a 2013 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 an application 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-forms-and-documents>.
  - 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.

Please see [Section IX Funding Restrictions](#), for additional information on the eligibility of vehicle and equipment replacements.

- 8. 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 or natural gas 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.

Funding can cover up to 40% of the cost (labor and equipment) of an eligible certified or compliant clean alternative fuel conversion. Eligible conversions are limited to those systems that have been certified by EPA and/or CARB, and those systems that have been approved by EPA for Intermediate-Age engines. EPA's lists of "Certified Conversion Systems for New Vehicles and Engines" and "Conversion Systems for Intermediate-Age Vehicles and Engines" are available at [www.epa.gov/vehicle-and-engine-certification/lists-epa-compliant-alternative-fuel-conversion-systems](http://www.epa.gov/vehicle-and-engine-certification/lists-epa-compliant-alternative-fuel-conversion-systems); CARB's list of "Approved Alternate Fuel Retrofit Systems" are available at: [www.arb.ca.gov/msprog/aftermkt/altfuel/altfuel.htm](http://www.arb.ca.gov/msprog/aftermkt/altfuel/altfuel.htm).

To be eligible for funding, conversion systems for engine model years 1995-2006 must achieve at least a 30% NO<sub>x</sub> reduction and a 10% PM reduction from the applicable certified

emission standards of the original engine. To be eligible for funding, conversion systems for engine model years 2007-2009 must achieve at least a 20% NO<sub>x</sub> reduction with no increase in PM from the applicable certified emission standards of the original engine. Applications 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 to demonstrate that the conversions result in the required emissions benefit.

Most states require the use of EPA approved systems. Vehicles operating in California, and other States that require CARB approved aftermarket systems, must follow conversion rules issued by CARB. Compliance with applicable state law is the sole responsibility of the fleet owner.

Please see [Section IX Funding Restrictions](#), for additional information on the eligibility of clean alternative fuel conversions.

**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:

- 1) Designated, as of the release date of this program guide, as Nonattainment Areas or Maintenance Areas for the following National Ambient Air Quality Standards. Data is sourced from EPA's Green Book of Nonattainment Areas for Criteria Pollutants. (<https://www.epa.gov/green-book>).
  - a) PM<sub>2.5</sub> 1997 Standard (Annual: 15 µg/m<sup>3</sup>, 24-hour: 65 µg/m<sup>3</sup>)
  - b) PM<sub>2.5</sub> 2006 Standard (Annual: 15 µg/m<sup>3</sup>, 24-hour: 35 µg/m<sup>3</sup>)
  - c) PM<sub>2.5</sub> 2012 Standard (Annual: 12 µg/m<sup>3</sup>, 24-hour: 35 µg/m<sup>3</sup>)
  - d) Ozone (O<sub>3</sub>) 2008 Standard (8-hour: 0.075ppm)
  - e) Ozone (O<sub>3</sub>) 2015 Standard (8-hour: 0.070ppm)
- 2) Where all or part of the population is exposed to more than 2.0 µg/m<sup>3</sup> of diesel particulate matter emissions. Data is sourced from the 2011 National-Scale Air Toxics Assessment ([www.epa.gov/national-air-toxics-assessment/2011-national-air-toxics-assessment](http://www.epa.gov/national-air-toxics-assessment/2011-national-air-toxics-assessment)).

In addition, priority should be given to projects based on whether the vehicles/engines/equipment targeted for diesel emissions reductions are located at, or service,

goods movement facilities such as:

- 1) ports and airports (e.g. places alongside navigable water with facilities for the loading and unloading of passengers and/or cargo from ships, ferries, and other vessels; places from which aircraft operate that have paved runways and terminals which include cargo, baggage and/or passenger-movement operations; places where foreign goods are inspected by customs officers and allowed to pass into and out of a country)
- 2) rail yards (e.g. places at which trains originate or terminate, or at which they are distributed or combined)
- 3) terminals (e.g. freight and 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/or passengers)
- 4) 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, Anticipated Outputs/Outcomes and Performance Measures**

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:** The activities to be funded under this announcement support EPA’s FY 2018-22 Strategic Plan. Awards made under this announcement will support Goal 1, “Core Mission: Deliver real results to provide Americas with clean air, land, and water, and ensure chemical safety,” Objective 1.1, “Improve Air Quality.” Under this objective, EPA will “Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.” Applicants must explain in their application how their project will further this objective.

Please read EPA’s FY 2018-2022 Strategic Plan ([www.epa.gov/planandbudget/strategicplan](http://www.epa.gov/planandbudget/strategicplan)) for more information.

EPA also requires that grant applicants adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7A1, 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)).

Applicants must include specific statements describing the environmental results of the proposed project in terms of well-defined outputs and, to the maximum extent practicable, well-defined outcomes that will demonstrate how the project will contribute to the priorities described above. Specifically, the proposed activities must reduce emissions from diesel fleets, thereby reducing local and regional air pollution of criteria pollutants and air toxics.

- 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 announcement 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 affected 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;
- a publicly available community engagement plan for meaningful engagement of the affected communities regarding either the environmental and/or other issues that the project is intended to address;
- 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, as specified in Section [XIII Reporting Requirement](#) of this Program.

- 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 announcement 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 carbon dioxide (CO<sub>2</sub>), and/or
- volatile organic compounds (VOCs).
- tons of pollution reduced annually;
- lifetime total project cost effectiveness for NO<sub>x</sub> and PM<sub>2.5</sub>;
- lifetime capital cost effectiveness for NO<sub>x</sub> and PM<sub>2.5</sub>;
- 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/or
- emissions reductions along freight transportation corridors.

**4. Performance Measures.** The applicant should also develop performance measures they expect to achieve through the proposed activities and describe them in their application. These performance measures will help gather insights and will be the mechanism to track progress concerning successful processes and output and outcome strategies and will provide the basis for developing lessons to inform future recipients. It is expected that the description of performance measures will directly relate to the projects outcomes and outputs, including but not limited to:

- oversight of project partners, subrecipients, and/or contractors and vendors;
- tracking and reporting project progress on expenditures, purchases, and other fiscal activities;
- tracking and reporting actual accomplishments versus proposed outputs/outcomes and proposed timelines/milestones;
- tracking and reporting project progress on installations/replacements by maintaining an accurate Project Fleet Description; and
- measuring and reporting on outcomes by maintaining an accurate Project Fleet Description and using EPA's Diesel Emissions Quantifier. Efforts should be made to track, measure and report the actual vehicle miles traveled, hours of use/operation, and fuel use for all vehicles and equipment involved in the project.



The following are questions to consider when developing output and outcome measures of quantitative and qualitative results:

- What are the measurable short term and longer term results the project will achieve?
- How does the plan measure progress in achieving the expected results (including outputs and outcomes) and how will the approach use resources effectively and efficiently?

## **IX. FUNDING 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. 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.
- E. 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.
- F. Mandated Measures:** Pursuant to 42 U.S.C. 16132(d)(2), no funds awarded under this program shall be used to fund the costs of emissions 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 emissions 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 emissions 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 emissions 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). Applications which include locomotives and/or marine engines and/or stationary engines must provide EPA a clear and concise justification for why/how the proposed emissions reduction is not subject to the Restriction for Mandated Measures. The justification must clearly demonstrate that:

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

**G. Fleet Expansion:** Funding under this program cannot 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. To be eligible for replacement, the vehicle, engine, or equipment must be fully operational and in current, regular service.
2. The replacement vehicle, engine, or equipment will continue to perform similar function and operation as the vehicle, engine, or equipment that is being replaced.
3. The replacement vehicle, engine, or equipment will be of similar type and 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 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 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.

4. 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 2010 engine model year (EMY) or newer vehicle is replaced, the 2010 EMY or newer vehicle may be retained or sold if the 2010 EMY or newer vehicle will replace an 1996-2009 EMY vehicle, and the 1996-2009 EMY vehicle will be scrapped. It is preferred that the scrapped unit currently operates within the same project location(s) as the 2010 EMY or newer vehicle currently operates, however alternative scenarios will be considered. The term "project location" as used in this program 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 existing and replacement vehicles are subject to the funding restrictions in this section of the program. 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) If a Tier 2 or Tier 3 locomotive, marine, or nonroad vehicle, equipment and/or engine is replaced, the units may be retained or sold if they will replace a similar, lower Tiered unit, and the lower Tiered unit will be scrapped. It is preferred that the scrapped unit currently operates within the same project location(s) as the original Tier 2 or 3 unit currently operates, however alternative scenarios will be considered. The term "project location" as used in this program guide 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 existing and replacement equipment are subject to the funding restrictions in this section of the program guide. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior EPA approval.
  - c) 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
  - d) 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.
  - e) Evidence of appropriate disposal is required in a final assistance agreement report submitted to EPA and includes 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. Evidence also includes a signed certificate of destruction (to be provided by the EPA Project Officer), or alternative documentation as approved by the EPA Project Officer.
  - f) 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.
  - g) 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.

- H. Single-Wide Wheels:** No funds awarded under this 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.
- I. Auxiliary Power Units:** No funds awarded under this program shall be used for the purchase of APUs or generators for vehicles with engine model year 2007 or newer.
- J. Replacement Technologies:** No funds awarded under this program shall be used for the purchase of engine retrofits, idle reduction technologies, low rolling resistance tires or advanced aerodynamic technologies if similar technologies have previously been installed on the truck or trailer.
- K. Highway Model Year:** No funds awarded under this program shall be used to retrofit (including idle reduction technologies and aerodynamics and tires), convert, or replace a transit bus, medium-duty, or heavy-duty highway vehicle with engine model year 1995 and older, 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 2010 or newer with other than zero tailpipe emission or low-NO<sub>x</sub>. Refer to Table 2 for further explanation.
- 1. Clean Alternative Fuel Conversion:** No funds awarded under this program shall be used to purchase certified/approved conversion systems that do not meet the following criteria:
    - a)** Existing engine model 1996-2006: Conversion kit must be certified or approved to achieve at least a 30% NO<sub>x</sub> reduction and a 10% PM reduction from the applicable certified emission standard of the original engine.
    - b)** Existing engine model 2007 and newer: Conversion kit must be certified or approved to achieve at least a 20% NO<sub>x</sub> reduction with no increase in PM from the applicable certified emission standards of the original engine.

**Table 2: Medium and Heavy-Duty Trucks, Transit Buses, and School Buses Funding Restrictions**

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Verified Idle Reduction, Tires, or Aerodynamics	Vehicle or Engine Replacement: EMY 2016+ (2013+ for Drayage)	Vehicle or Engine Replacement: EMY 2016+ Zero Emission or Low-NO <sub>x</sub>	Clean Alternative Fuel Conversion
older - 1995	No	No	No	No	No	No	No
1996 - 2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007 - 2009	No	No	Yes	Yes*	Yes	Yes	Yes
2010 - newer	No	No	No	Yes*	No	Yes	Yes

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

**L. Nonroad Operating Hours:** Engine hours may be combined to reach the thresholds below where two units will be scrapped and replaced with a single unit.

1. Agricultural Pumps: No funds awarded under this program shall be used to retrofit, replace or upgrade agricultural pumps that operate less than 250 hours per year.
2. All Other Nonroad Engines: No funds awarded under this program shall be used to retrofit, replace, or upgrade all other nonroad engines that operates less than 500 hours per year.

**M. Nonroad Model Year and Tier:** No funds awarded under this program shall be used to retrofit, upgrade or replace a nonroad engine that is 50 HP or less and engine model year 2005 or older, or between 51-300 HP and engine model year 1995 or older, or 301 HP or greater and engine model year 1985 or older. Refer to Table 3 for further explanation.

1. Equipment and Vehicle Replacement: No funds awarded under this program shall be used to replace nonroad vehicles and equipment with vehicles/equipment powered by unregulated, Tier 1, or Tier 2 compression ignition (CI) engines. Vehicles/equipment powered by Tier 3 and Tier 4 interim (4i) CI engines are allowed when Tier 4 final CI engines are not yet available from the OEM for 2019 model year vehicles/equipment under the Transition Program for Equipment Manufacturers (TPEM). No funds awarded under this program shall be used to replace nonroad vehicles and equipment with vehicles/equipment powered by unregulated or Tier 1 nonroad large spark-ignition (SI) engines.
2. Engine Replacement: No funds awarded under this program shall be used to replace nonroad engines with Tier 3 or lower CI engines. No funds awarded under this program shall be used to replace nonroad engines with Tier 1 or lower SI engines.

**Table 3. Nonroad Engine Funding Restrictions**

Current Engine Horsepower	Current Engine Model Year (EMY) and Tier	Vehicle/Equipment Replacement: EMY 2019+					Verified Retrofit
		Compression Ignition			Spark Ignition	Zero Emission	
		Tier 0-2	Tier 3-4i	Tier 4	Tier 2		
0-50	2006 and Newer; Unregulated – Tier 2	No	No	Yes	Yes	Yes	Yes
51-300	1996 and Newer; Tier 0 – Tier 2	No	Yes*	Yes	Yes	Yes	Yes
51-300	1996 and Newer; Tier 3	No	No	Yes	Yes	Yes	Yes
301+	1986 and Newer; Tier 0 – Tier 2	No	Yes*	Yes	Yes	Yes	Yes
301+	1986 and Newer; Tier 3	No	No	Yes	Yes	Yes	Yes
Current Engine Horsepower	Current Engine Model Year (EMY) and Tier	Engine Replacement: EMY 2019+**				Verified Engine Upgrade	
		Compression Ignition		Spark Ignition	Zero Emission		
		Tier 0-3	Tier 4	Tier 2			
0-50	2006 and Newer; Unregulated – Tier 2	No	Yes	Yes	Yes	Yes	
51-300	1996 and Newer; Tier 0 – Tier 3	No	Yes	Yes	Yes	Yes	
301-750	1986 and Newer; Tier 0 – Tier 3	No	Yes	Yes	Yes	Yes	
751+	1986 and Newer; Tier 0 – Tier 2	No	Yes	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 2019 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 2019.

**N. Locomotive and Marine Operating Hours:** No funds awarded under this program shall be used to retrofit, replace, upgrade or install idle reduction technologies locomotive or marine engines that operate less than 1,000 hours per year. Engine hours may be combined to reach the 1000-hour threshold where two engines will be scrapped and replaced with a single engine.

**O. Marine Engine Tier:** No funds awarded under this program shall be used to replace or upgrade Tier 3 and Tier 4 marine engines and vessels with other than zero tailpipe emission technology,

or to replace marine engines with a Tier 2 or lower CI marine engine. Refer to Table 4 for further explanation.

**Table 4: Marine Engines Funding Restrictions**

Current Engine Tier	Vessel or Engine Replacement: EMY 2019+ *				Certified Remanufacture System	Verified Engine Upgrade
	Compression Ignition		Spark Ignition	Zero Emission		
	Tier 1-2	Tier 3-4				
Unregulated – Tier 2	No	Yes	Yes	Yes	Yes	Yes
Tier 3 - 4	No	No	No	Yes	No	No

\*Previous engine model year engines may be used if the engine is certified to the same emission standards applicable to EMY 2019.

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

**Q. Locomotive Engine Tier:** No funds awarded under this program shall be used to replace any locomotive or locomotive engine with a Tier 3 or lower locomotive or engine. No funds awarded under this program shall be used to replace Tier 2+ line-haul locomotives or locomotive engines. No funds awarded under this program shall be used to install Automatic Engine Start-Stop technologies on locomotives currently certified to Tier 0+ or higher. Refer to Table 5 for further explanation.

**Table 5: Locomotive Engines Funding Restrictions**

Current Locomotive Tier	Locomotive Replacement or Engine Replacement: EMY 2019+* or Zero Emission			Verified Retrofit	Idle-Reduction Technology	Certified Remanufacture System
	Tier 0+ - 3	Tier 4	Zero Emission			
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 2019.

\*\*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 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.

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

## **X. COST-SHARE REQUIREMENTS**

**A. Mandatory Cost-Share:** 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 6.

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 EPA 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.C](#), 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 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. Please note: EPA DERA funds may not be used to meet mandatory cost-sharing requirements for projects funded with environmental mitigation funds. Further, environmental mitigation funds (e.g., VW Environmental Mitigation Trust Funds via the DERA Option) may not be used to meet non-federal mandatory cost-share requirements of any DERA grant.

**Table 6. DERA Funding Limits and Mandatory Cost-Share Requirements**

<b>DERA Eligible Activities</b>	<b>DERA Funding Limits (EPA 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 Bundled with Exhaust Control Retrofit	100%	0%
Stand-alone 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 – Zero Emission	60%	40%
Vehicle/Equipment Replacement – Diesel or Alternative Fuel	25%	75%
Vehicle/Equipment Replacement – Low NOx	35%	65%
Vehicle/Equipment Replacement – Zero Emission	45%	55%
Vehicle Replacement - Drayage	50%	50%
Clean Alternative Fuel Conversion	40%	60%

**B. Voluntary Cost-Share:** Under this funding opportunity, voluntary cost sharing is when an applicant voluntarily proposes to legally commit to provide costs or contributions to support the project when a mandatory cost share is not required, or when the applicant proposes to provide more than the required cost share. Applicants who propose to use a voluntary cost share must include the costs or contributions for the voluntary cost share in the project budget on the SF-424. If an applicant proposes a voluntary cost share, the following apply:

- A voluntary cost share is subject to the match provisions in the grant regulations 2 CFR Part 200 as applicable.
- A voluntary cost share may only be met with eligible and allowable costs.
- The recipient may not use other sources of federal funds to meet a voluntary cost share unless the statute authorizing the other federal funding provides that the federal funds may be used to meet a cost share requirement on a federal grant.

The recipient is legally obligated to meet any proposed voluntary cost share that is included in the approved project budget. If the proposed voluntary cost share does not materialize during grant performance, then EPA may reconsider the legitimacy of the award and/or take other appropriate action as authorized by 2 CFR Part 200, as applicable.



**C. Other Leveraged Funds:** Other leveraged funds are resources contributed to the project that are not identified as a mandatory or voluntary cost share and are not part of the total project cost under the grant award. This form of leveraging may include funding from another federal grant (if authorized), from an applicant's own resources, or resources from other third-party sources, and do not need to be eligible and allowable project costs under the EPA assistance agreement.

It is appropriate to include other leveraged funds in the budget if the applicant is proposing to implement a rebate program for equipment and vehicle purchases. EPA funds may be used to issue a rebate up to the funding limitations listed in Table 6 above. In the budget, the EPA funds for the rebate are appropriately listed under the Other budget category as "Participant Support Costs." However, the program participant's share of the vehicle that is not covered by the rebate is not considered a mandatory nor voluntary cost share; the program participant's share of the vehicle that is not covered by the rebate is considered other leveraged funds.

For example, EPA will fund up to 25% of the cost of an eligible vehicle powered by an engine certified to EPA emission standards. If a truck owner purchased a new truck for \$100,000 they could receive a rebate for \$25,000. In the budget, the rebate (e.g. \$25,000) is appropriately listed under the Other budget category as "Participant Support Costs." The program participant's share of the vehicle (e.g. \$75,000) is considered other leveraged funds.

Other leveraged funds should NOT be included in the official grant project budget (i.e. the SF424 and SF424A), however the Budget Narrative should account for other leveraged funds where Participant Support Costs are included in the budget. Please see Appendix A for more information on Participant Support Costs.

If applicants propose to provide other leveraged funds, EPA expects them to make the effort to secure the leveraged resources described in their applications. If the proposed leveraging does not materialize during grant performance, then EPA may reconsider the legitimacy of the award and/or take other appropriate action as authorized by 2 CFR Part 200, as applicable.

## **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. 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 appropriate 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.

- C. 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.
- D. 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).
- E. 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.

- F. Performance Partnership Grants:** Funds awarded under this program are not eligible for inclusion with the state's Performance Partnership Grants.
- G. State Notification:** Executive Order 12372, Intergovernmental Review of Federal Programs, may be applicable to awards resulting from this announcement. EPA implemented the Executive Order in 40 CFR Part 29. EPA may require applicants selected for funding to provide a copy of their application to their State Point of Contact (SPOC) for review as provided at 40 CFR 29.7 and 40 CFR 29.8. The SPOC list can be found in the Intergovernmental Review (SPOC List) document: [www.whitehouse.gov/wp-content/uploads/2017/11/SPOC-Feb.-2018.pdf](http://www.whitehouse.gov/wp-content/uploads/2017/11/SPOC-Feb.-2018.pdf)
- H. 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.
- I. 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 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.

### **XIII. APPENDIX A: HOW TO FUND PROJECTS AND PARTNERSHIPS**

There are several ways DERA recipients may implement projects and fund project partners depending on the roles and responsibilities of each. In addition to the information provided below, also refer to the “Partnerships, Contractors and Subawards” guidance in Section IV of the General Solicitation Provisions.

If a DERA grant recipient intends to fund target fleets that they do not own and operate, they have the option to (1) make a **subaward** or (2) provide **participant support costs** to a project partner. Both options can fund a project partner’s equipment and installation costs, but only subawards can fund a project partner’s direct and indirect costs such as personnel and travel. If the DERA grant recipient is only funding a project partner’s equipment and installation costs, they may instead choose to provide participant support costs rather than a subaward in order to avoid the extensive subaward monitoring and management requirements.

**Direct Implementation:** Where the target fleets are owned and operated by the DERA grant recipient, the recipient may directly implement the project. The recipient is responsible for procuring all vehicles/engine/equipment, and any required contractual services, in accordance with applicable competitive procurement requirements in [2 CFR Part 200](#). The applicant’s/recipient’s budget should reflect only those expenses incurred directly by the recipient organization for personnel, fringe, travel, supplies, equipment, contractual, other, and indirect.

**Subawards:** DERA grant recipients (i.e. pass-through entities) may make subawards to subrecipients to carry out a portion of the DERA funded program or project. Subawards establish a financial assistance relationship under which the subrecipient’s employees and contractors implement programs and projects to accomplish the goals and objectives of the DERA grant. Under DERA, a non-Federal entity or individual is eligible to receive a subaward even if it is not eligible to receive a DERA grant from EPA directly. While there may be some situations in which a subaward to an individual may be appropriate, those situations are rare.

Note that subawards are different than procurement contracts. Contractors such as equipment suppliers, consulting firms (including individual consultants) or other vendors provide goods and services directly to DERA grant recipients for direct implementation activities. 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. In other grant programs, for-profit entities participating in grant activities are typically contractors rather than subrecipients. However, DERA is one of the few grant programs where it is appropriate for pass-through entities to make subawards to for-profit organizations to purchase and install equipment for that organization’s own use. For example, if a DERA recipient directly implementing a project purchases school buses from a vendor, the appropriate funding instrument is a procurement contract and the transaction is subject to the applicable competitive

procurement requirements. Referring to an individual consultant or vendor as a “partner” does not exempt the transaction from competitive procurement requirements.

Alternately, if a DERA recipient provides funding to a school district for the school district to implement its own diesel emissions reduction program for its school bus fleet, the appropriate funding instrument is a subaward. Indicators that the transaction is a subaward include eligible and allowable costs to support the following in addition to the subrecipient vehicle and equipment purchase and installation costs:

- subrecipient personnel and overhead including indirect costs incurred for project management, coordination, procurement, reporting and outreach;
- subrecipient travel costs required for project implementation and oversight; and
- subrecipient contractual costs for design and engineering services.

If a recipient chooses to pass funds from its DERA grant to other entities through subawards, the recipient must comply with applicable provisions of 2 CFR Part 200, the EPA Subaward Policy, and EPA’s National Term and Condition for Subawards. Note that under 2 CFR 200.331 there are extensive requirements for subrecipient monitoring and management that apply to pass-through entities. Additionally, Federal requirements including the 2 CFR Part 200 Procurement Standards “flow down” to subrecipients. By accepting a DERA grant, the recipient is certifying that it either has systems in place to comply with the regulatory and EPA policy requirements specified in these provisions, or that the recipient will refrain from making subawards with EPA funding until the required systems are designed and implemented.

EPA’s Award Official must approve subawards to for-profit entities and individuals on the basis of either a precise description of the subaward in the EPA approved budget and work plan, or on a transaction by transaction basis. The applicant’s/recipient’s DERA workplan and budget narrative should include detailed descriptions of any proposed subawards and include cost estimates for subawards as line items under the “Other” budget category. Should a DERA recipient decide to make a subaward that was not described in the approved work plan and budget the recipient must obtain prior written approval from EPA’s Award Official for the subaward.

There is no requirement for recipients to compete subawards under DERA, however pass-through entities may choose to select subrecipients competitively provided this practice is consistent with applicable statutes, regulations and the terms of their DERA grants. Recipients may use the subaward template contained in Appendix D of the Subaward Policy to assist them in complying with the “subaward content” requirements, however EPA does not mandate the use of this template.

**Participant Support Costs:** DERA grant recipients may provide participant support costs to program beneficiaries to enable beneficiaries to participate in the recipient’s program or project. Rebates, subsidies, and similar one-time, lump-sum payments to program beneficiaries for the purchase of eligible emissions control technologies and vehicle replacements are considered to be participant support costs. Program beneficiaries rather than the DERA recipient own the new vehicle, engine, or technology.

Program beneficiaries only receive reimbursement for up to the allowable cost share of eligible equipment and installation costs. Participant support costs differ from subawards in that the beneficiary is participating in the DERA recipient's project or program instead of implementing their own project or program. Program beneficiaries may be individual owner/operators or private or public fleet owners, however program beneficiaries are not employees, contractors or subrecipients of the DERA grant recipient. Program beneficiaries are not subject to the same Federal requirements as the DERA grant recipient or subrecipients. For example, the competitive procurement requirements do not apply to program beneficiaries purchasing vehicles or equipment.

Recipients may also use participant support costs to purchase technologies or vehicles on behalf of program beneficiaries. In some situations, this approach allows DERA recipients to achieve economies of scale and/or take advantage of existing purchase contracts. Competitive procurement requirements apply to the DERA recipient when the recipient takes this approach. For example, a recipient may award a competitive contract to a technology vendor to purchase and install emissions reduction equipment on vehicles owned by program beneficiaries.

Participant support costs for rebates, subsidies or other payments must be supported by guidelines issued by the recipient and approved by EPA, defining the rules, restrictions, timelines, programmatic requirements, reporting and transaction documentation requirements, eligibility, and funding levels that rebate, subsidy or other payment beneficiaries must follow. Allowable rebates, subsidies or other payments must be issued only for eligible activities and within applicable cost share limits as defined in the program guide and the terms of the DERA grant agreement. Additionally, there must be written agreement between recipient or subrecipient and the program beneficiary that:

- Describes the activities that will be supported by rebates, subsidies or other payments;
- Specifies the amount of the rebate, subsidy or payment;
- Identifies which party will have title to equipment (if any) purchased with a rebate or subsidy; and
- Establishes source documentation requirements to ensure proper accounting of EPA funds.

EPA's Award Official must approve participant support costs on the basis of either a precise description of the participant support costs in the EPA approved budget and work plan, or on a transaction by transaction basis. The applicant's/recipient's DERA workplan and budget narrative should include detailed descriptions of any proposed participant support costs and include cost estimates for participant support costs as line items under the "Other" budget category. Should a DERA recipient decide to award participant support costs that were not described in the approved work plan and budget the recipient must obtain prior written approval from EPA's Award Official. Moreover, after a grant is awarded, should a recipient decide to modify the amount approved (upwards or downwards) for participant support costs, prior written approval from EPA's Award Official is also required.

When creating budgets, applicants/recipients must exclude participant support costs from Modified Total Direct Costs (MTDC) for calculation of indirect costs as required by 2 CFR 200.68.

**Resources**

Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements (<https://www.epa.gov/grants/best-practice-guide-procuring-services-supplies-and-equipment-under-epa-assistance-agreements>)

EPA Subaward Policy with attachments (<https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients>). Includes:

- EPA Subaward Policy
- Appendix A: Distinctions Between Subrecipients and Contractors
- Appendix B: National Term and Condition for Subawards
- Appendix C: Model Programmatic Subaward Reporting Requirement
- Appendix D: Subaward Agreement Template