AGENCY: ENVIRONMENTAL PROTECTION AGENCY (EPA)

TITLE: 2022-2023 Diesel Emissions Reduction Act (DERA) National Grants

**ANNOUNCEMENT TYPE:** Notice of Funding Opportunity

FUNDING OPPORTUNITY NUMBER: EPA-OAR-OTAQ-23-03

ASSISTANCE LISTING NUMBER: 66.039

#### **IMPORTANT DATES**

Wednesday, August 2<sup>nd</sup>, 2023

Notice of Funding Opportunity (NOFO) Opens
Friday, November 10<sup>th</sup>, 2023

Final Date to Submit Questions

Friday, December 1<sup>st</sup>, 2023 NOFO Closes – Application Deadline March 2024 Anticipated Notification of Selection

June 2024 – August 2024 Anticipated Awards

Application packages must be submitted electronically to EPA through <u>Grants.gov</u> no later than **Friday, December 1, 2023, at 11:59 p.m. Eastern Time (ET)** to be considered for funding.

The total estimated funding expected to be available for awards under this competitive opportunity is approximately \$115 million; \$58 million funded with FY 2022 funding and \$57 million funded with FY 2023 funding.

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## I. FUNDING OPPORTUNITY DESCRIPTION

# A. Background and Summary

This notice announces the availability of funds under the Diesel Emissions Reduction Act (DERA) program and solicits applications from eligible entities to incentivize and accelerate the upgrading or retirement of the nation's legacy diesel engine fleet. Eligible activities include the retrofit or replacement of existing diesel engines, vehicles, and equipment with EPA and California Air Resources Board (CARB) certified engine configurations and verified retrofit and idle reduction technologies.

Applications will be accepted from regional, state, or local agencies; Tribal governments (or intertribal consortia) or Alaska Native Villages; or port authorities, which have jurisdiction over transportation or air quality. School districts, municipalities, metropolitan planning organizations (MPOs), cities, and counties are all generally eligible entities under the program to the extent that they fall within these categories. Applications will also be accepted from nonprofit organizations or institutions that represent or provide pollution reduction or educational services to persons or organizations that own or operate diesel fleets; or have, as their principal purpose, the promotion of transportation or air quality.

EPA anticipates awarding a total of approximately \$115 million under this NOFO: \$58 million in FY 2022 funding and \$57 million in FY 2023 funding; it is anticipated that approximately 4-10 cooperative agreements will be made per each of <u>EPA's ten regions</u> subject to the availability of funds, the quantity and quality of applications received, and other considerations.

There are several ways DERA recipients may implement projects and fund project partners depending on the roles and responsibilities of each. If the applicant is the owner of the target vehicles, the applicant may directly implement the project. If the applicant is partnering with diesel fleet owners, the applicant may award subawards or participant support costs (i.e., rebates). Please refer to Appendix A for detailed guidance on funding partnerships.

Reducing emissions from diesel engines is one of the most important air quality challenges facing the country. From transportation to energy generation, the diesel engine powers almost every sector of the American economy. Due to more stringent EPA diesel engine emissions standards over the past few decades, engines currently coming off the manufacturing line are now sixty times cleaner. However, despite these tighter standards for new engines, the nearly eight million legacy diesel engines already in use continue to emit large amounts of PM<sub>2.5</sub> and NOx. "Legacy diesel engines" are defined by the DERA program as the operating nonroad diesel and medium to heavy-duty highway diesel engines with engine model years 2009 and earlier. Previously, DERA defined legacy engines as 2006 and earlier, but this has been expanded to include 2007-2009 engines which do not meet current emission standards. These air pollutants contribute to serious public health problems like asthma, lung disease, and various other cardiac and respiratory illnesses, which result in thousands of premature deaths, millions of lost workdays, and numerous other negative health impacts every year in the United States.

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<sup>&</sup>lt;sup>1</sup> Heavy-Duty Highway Compression-Ignition Engines and Urban Buses: Exhaust Emission Standards

To address these diesel emissions and protect public health and air quality, EPA is authorized under DERA to offer funding assistance to accelerate the upgrade, retrofit, and turnover of the legacy diesel fleet. Since the inaugural year of funding for DERA in 2008, EPA has awarded over \$800 million to replace or retrofit approximately 73,700 engines or vehicles to reduce diesel emissions nationwide. The DERA program promotes an array of diesel emissions strategies by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations, and state and local officials to address the varying emissions reductions in areas receiving disproportionate impacts from diesel fleets to provide an environment where all people enjoy the same degree of protection from environmental and health hazards.

This NOFO is a competitive grant program. The DERA program has another competitive funding opportunity, <u>DERA Tribal and Insular Area Grants</u>, which funds similar activities but is only open to eligible Tribal and Insular Area applicants. Funding for school bus replacement is also available through EPA's <u>Clean School Bus Program</u>.

# **B. Program Goals and Objectives**

- 1. **DERA Programmatic Priorities**: The Diesel Emissions Reduction Act (DERA) allows EPA to prioritize certain applicants in the DERA National Grants. The statute enables the program to prioritize projects that maximize public health benefits, are the most cost-effective, and that serve areas with the highest population density, that are poor air quality areas (including nonattainment or maintenance areas and areas with toxic air pollutant concerns), that receive a disproportionate quantity of air pollution from diesel fleets, or that use a community-based multistakeholder collaborative process to reduce toxic emissions. The following sections define the DERA National Grants programmatic priorities under this NOFO. Applications which address and demonstrate that the project meets these programmatic priorities will receive priority for funding under the evaluation criteria defined in Section V of this NOFO.
  - a. Goods Movement Facilities: Priority for funding is given to projects based on whether the vehicles/engines/equipment targeted for diesel emissions reductions are located at, or service, goods movement facilities as defined below. Applicants should include the name of the specific port, airport, rail yard, terminal, or distribution center where the affected vehicles operate. Points will be based upon the percentage of time targeted vehicles operate at, and/or the percentage of the total targeted vehicles that operate at, goods movement facilities.
    - 1) **Ports** places alongside navigable water with facilities for the loading and unloading of passengers and/or cargo from ships, ferries, and other vessels
    - 2) Airports places where aircraft operate that have paved runways and terminals which include cargo, baggage and/or passenger-movement operations
    - 3) Rail Yards a system of tracks, other than main tracks and sidings, used for making up trains, for storing cars, and for other purposes
    - **4) Terminals** 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

<sup>&</sup>lt;sup>2</sup> https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1015S8Q.pdf

- 5) Distribution Centers facilities that perform consolidation, warehousing, packaging, decomposition, and other functions linked with handling freight, often in proximity to major transport routes or terminals, and/or which generate large amounts of truck traffic
- b. Environmental Justice and Disadvantaged Communities: Environmental justice (EJ) is the just treatment and meaningful involvement of all people regardless of race, color, national origin, income, Tribal Affiliation, or disability in agency decision-making and other Federal activities that affect human health and the environment. Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. Meaningful involvement means people have an opportunity to participate in decisions about activities that may affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; community concerns will be considered in the decision-making process; and decision makers will seek out and facilitate the involvement of those potentially affected. EPA will evaluate environmental justice issues under criterion 3 of Section V.A. of this NOFO.

The DERA statute enables the program to prioritize projects that serve poor air quality areas (including nonattainment or maintenance areas and areas with air toxic air pollutant concerns), and those that use a community-based multistakeholder collaborative process to reduce toxic emissions. This allows the program to target communities with potential environmental justice concerns; that is, communities adversely and disproportionately affected by environmental, climate change, and human health harms or risks, and support a broad geographic distribution of funds. Additionally, DERA has been identified as part of the Justice40 Initiative, which creates a goal that 40 percent of applicable federal benefits flow to disadvantaged communities.<sup>3</sup>

- 1) **Disadvantaged Communities:** For the purposes of this NOFO, "disadvantaged communities" are defined as meeting one or both of the following criteria:
  - a) Nonattainment or Maintenance Area: These counties are identified as priority project locations for the DERA program because they are designated as nonattainment areas or maintenance areas for the following National Ambient Air Quality Standards. Data is sourced from <a href="EPA's Green Book of Nonattainment Areas for Criteria Pollutants">EPA's Green Book of Nonattainment Areas for Criteria Pollutants</a>.
    - i. PM2.5 1997 Standard (Annual: 15 μg/m3, 24-hour: 65 μg/m3)
    - ii. PM2.5 2006 Standard (Annual: 15 μg/m3, 24-hour: 35 μg/m3)
    - iii. PM2.5 2012 Standard (Annual: 12 μg/m3, 24-hour: 35 μg/m3)
    - iv. Ozone (O3) 2008 Standard (8-hour: 0.075ppm)
    - v. Ozone (O3) 2015 Standard (8-hour: 0.070ppm)

The term "project location" refers to the area(s) where the affected vehicles or engines equipment operate. A list of counties that have been designated as priority project locations can be found on the DERA National Grants website.

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<sup>&</sup>lt;sup>3</sup> Tackling the Climate Crisis at Home and Abroad, 86 Fed. Reg., 7619 (Feb. 1, 2021).

b) Area of Air Toxics Concern: These counties are identified as priority project locations for the DERA program because they contain at least one census tract where the modeled ambient diesel PM concentration from the 2019 Air Toxics Screening Assessment is above the 80th percentile (0.38 μg/m3 for 2019) for census tracts nationwide. The 80th percentile is a programmatic cutoff designed to help evaluate those areas that are most likely to have higher concentrations of diesel PM in the year of analysis (i.e., the year for which data are available); this level was not chosen based on risk or other health-based criteria or thresholds. AirToxScreen is a screening tool and there are limitations and uncertainties associated with it; see: AirToxScreen Limitations.

These program criteria for "disadvantaged communities" are drawn from the prioritization authorization described in the DERA statute.<sup>4</sup> The methodology for calculating covered program benefits to disadvantaged communities may be updated in the future as additional funding opportunities are offered under the program.

- 2) Community Engagement: Priority for funding is given to applications which demonstrate engagement with the affected communities and/or populations, especially local residents, to ensure their meaningful participation with respect to the design, planning, and performance of the project. Meaningful involvement means people have an opportunity to participate in decisions about activities that may affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; community concerns will be considered in the decision-making process; and decision makers will seek out and facilitate the involvement of those potentially affected.
- **c. Project Resilience to Climate Impacts**: Priority for funding is given to applications which demonstrate the ability to protect grant funded investments from severe weather events. EPA will evaluate applications based on the quality and extent to which the project assesses and implements adaptation considerations described below to help ensure that the project achieves its expected outcomes even as the climate changes.

Adapting to climate change involves actions by individuals, businesses, governments, and others to build resilience and reduce vulnerability of human and natural systems to unavoidable climate impacts. Adaptation also reduces the long-term costs of responding to these impacts. Applicants can demonstrate consideration of climate change adaptation through measures taken to anticipate, prepare for, and avoid adverse impacts of climate change. For example, assessing project vulnerability to climate impacts can be incorporated into project planning, such as siting decisions and operational plans. Measures taken to avoid damages could include ensuring fleets and equipment are protected from impacts such as flooding and sea level rise and protecting infrastructure from storm damage.

<sup>&</sup>lt;sup>4</sup> https://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter149/subchapter7/partF&edition=prelim

2. Workforce Development: Evaluation criteria points will be given to applications that demonstrate plans and activities to prepare their workforce for the project, such as conducting robust workforce planning to ensure current drivers, mechanics, electricians, and other essential personnel receive training to safely operate and maintain the new vehicles, engines, infrastructure, and equipment, in order to maximize the useful life of any certified engine configuration, verified technology, or emerging technology used or funded by the eligible entity. Additionally, evaluation criteria points will be given to applications which demonstrate policies and protections that currently exist or will be put in place to prevent existing workers from being replaced or displaced because of new technologies purchased with funding awarded under this NOFO. Evaluation criteria points will be given to applicants who demonstrate that they engage with workers and their representatives directly in the development of workforce planning activities to incorporate worker voice into the project.

EPA will evaluate this criterion based on the quality and extent of the workforce planning activities. Applicants can demonstrate workforce planning by clearly articulating which types of jobs will be impacted by the project, how they have or will engage those workers, how they will provide training, resources, and support to those workers for implementing the project (including the amount of time workers will spend in training and the skills they will develop), and clarifying if workers will be compensated with their regular wages for their time spent in training. Plans should make clear how they prioritize the health and safety of workers through evidence of a health and safety program that adheres to Occupational Safety and Health Administration regulations or other applicable regulations, including any modifications needed in response to the project. Where applicable, electricians working on EVSE are strongly encouraged to be certified by the Electric Vehicle Infrastructure Training Program.

**3. Diesel Vehicles, Engines and Equipment**: Projects may target in-use medium and heavy-duty diesel-powered highway vehicles and diesel powered nonroad vehicles and equipment, as defined in Table 1, below.

Table 1: Diesel Vehicles, Engines and Equipment

	Includes diesel powered school buses of Type A, B, C and D. A "school
	bus" is defined as a passenger motor vehicle, designed to carry a driver and
School Buses	more than 10 passengers, that the Secretary of Transportation decides is
	likely to be used significantly to transport preprimary, primary, and
	secondary school students to or from school or an event related to school.
Transit Buses	Includes diesel powered medium-duty and heavy-duty transit buses (see
Transit Duses	definition of eligible Class 5-8 vehicles below).
	Includes diesel powered medium-duty and heavy-duty highway vehicles
Madium duty on	with gross vehicle weight rating (GVWR) as defined below:
Medium-duty or heavy-duty	Class 5 (16,001 -19,500 lbs GVWR);
trucks	Class 6 (19,501 – 26,000 lbs GVWR);
trucks	Class 7 (26,001 – 33,000 lbs GVWR);
	Class 8 (33,001 lbs GVWR and over)
Marine Engines	Includes diesel powered Category 1, 2, and 3 marine engines and vessels.

Locomotives	Includes diesel powered line-haul, passenger, and switch engines and locomotives.
Nonroad engines, equipment, or vehicles <sup>5</sup>	Diesel powered nonroad engines, equipment, and vehicles including, but not limited to, those used in construction, handling of cargo (including at ports and airports), agriculture, mining, or energy production (including stationary generators and pumps). Eligible nonroad equipment includes transport refrigeration units (TRUs). Please see the <a href="TRU Factsheet">TRU Factsheet</a> found on the <a href="DERA National Grants">DERA National Grants</a> website for information on TRUs and eligible TRU projects.

**4. Diesel Emission Reduction Solutions:** Projects may upgrade existing diesel vehicles and equipment using the diesel emissions reduction solutions defined in Table 2, below.

**Table 2. Diesel Emission Reduction Solutions** 

Certified Vehicle and Equipment Replacements	Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can be replaced with newer, cleaner, vehicles and equipment. Eligible replacement highway vehicles include those certified by EPA and/or CARB to run on diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery, or fuel cell). Eligible replacement nonroad equipment, locomotives, and marine vessels include those powered by EPA and/or CARB certified diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), hybrid engines. Nonroad equipment, locomotives, and marine vessels powered by zero tailpipe emissions power sources (grid, battery, or fuel cell) do not require EPA or CARB certification.
Certified Engine Replacement	Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can have their engines replaced with newer, cleaner, engines. Eligible replacement highway engines include those certified by EPA and/or CARB for use with diesel or cleaner alternative fuels (including gasoline), electric generators (gensets), and hybrid engines, and zero tailpipe emissions power sources (grid, battery, or fuel cell). Eligible replacement nonroad, locomotive, and marine engines include those powered by EPA and/or CARB certified diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), and hybrid engines. Nonroad equipment, locomotives, and marine vessel engine replacement with zero tailpipe emissions power sources (grid, battery, or fuel cell) do not require EPA or CARB certification.

Certified Remanufacture Systems	Generally, a certified remanufacture system is applied during an engine rebuild and involves the removal of parts on an engine and replacement with parts that cause the engine to represent an engine configuration which is cleaner than the original engine. Some locomotives and marine engines can be upgraded through the application of a certified remanufacture system (i.e., kit). Engine remanufacture systems may not be available for all engines, and not all remanufacture systems may achieve an emissions benefit. Applications for EPA certified remanufacture systems should include a discussion of the availability of engine remanufacture systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the upgrade will result in a PM and/or NOx emissions benefit.
Verified Idle Reduction Technologies	An idle reduction project is generally defined as the installation of a technology or device that reduces unnecessary idling of diesel engines 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. EPA SmartWay verified technologies currently include options to reduce idling for long haul Class 8 trucks equipped with sleeper cabs, school buses, transport refrigeration units, locomotives, and marine vessels.
Verified Retrofit Technologies	Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include engine exhaust after-treatment technologies, such as diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), closed crankcase ventilation systems (CCVs), and selective catalytic reduction systems (SCRs). Manufacturer engine upgrades which achieve specific levels of emission reductions by applying a package of components have been verified as retrofits for some nonroad and marine engines. Several systems which convert a conventional diesel engine configuration to a hybrid-electric system have been verified as retrofits for some nonroad and marine engines. Some cleaner fuels and additives have been verified as retrofits by EPA and/or CARB to achieve emissions reductions when applied to an existing diesel engine. Older, heavy-duty diesel vehicles that will not be retired for several years are good candidates for verified retrofit technologies. EPA suggests that applicants proposing to install verified retrofit technologies consult with suppliers to confirm that the proposed vehicles/engines and their duty-cycles are good candidates for the technology.
Clean Alternative Fuel Conversions	Existing highway diesel engines can be altered to operate on alternative fuels such as propane and natural gas by applying a certified alternative fuel conversion kit.

Verified Aerodynamic Technologies	To improve fuel efficiency, long haul Class 8 trucks can be equipped with EPA verified aerodynamic devices and/or low rolling resistance tires.
and Low Rolling	
Resistance Tires	

## C. Environmental Results and Strategic Plan Information

Pursuant to Section 6.a. of EPA Order 5700.7A1, "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 <a href="EPA Order 5700.7A1">EPA Order 5700.7A1</a>, <a href="Environmental Results under Assistance Agreements">Environmental Results under Assistance Agreements</a>). 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 Strategic Plan goals listed below.

- 1. Linkage to EPA Strategic Plan: The activities to be funded under this announcement support EPA's Fiscal Year (FY) 2022-2026 Strategic Plan. Awards made under this announcement will support Goal 1, "Tackle the Climate Crisis" Objective 1.1, "Reduce Emissions that Cause Climate Change," of EPA's Strategic Plan. All applications must be for projects that support the goals and objectives above. For more information see <a href="EPA's FY 2022 FY 2026 EPA Strategic Plan">EPA's FY 2022 FY 2026 EPA Strategic Plan</a>.
- **2. Outputs:** The term "output" means an environmental activity, effort, and/or associated work product related to an environmental goal or 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 may include, but are not limited to:

- Number of replaced or retrofitted engines/vehicles/equipment; and/or
- Hours of idling reduced.

Progress reports and a final report will also be required outputs, as specified in Section VI.D. "Reporting Requirement," of this NOFO.

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

- Engaging with local residents to ensure their meaningful participation with respect to the design, planning, 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
- Establishing a clear point of contact in a public platform for community issues and complaints
- A publicly documented policy or process for getting community input on operations and projects that impact air quality
- Adoption of an idle reduction policy
- The completion of a baseline mobile source emission inventory for PM<sub>2.5</sub> and or NOx;
- 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 listservs, websites, journals, and outreach events
- **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 environmental, behavioral, health-related, or programmatic in nature, but should 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  $(PM_{2.5})$
  - o nitrogen oxides (NOx)
  - o 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 NOx and PM<sub>2.5</sub>
- Lifetime capital cost effectiveness for NOx and PM<sub>2.5</sub>
- Net reduction in gallons of diesel fuel used
- Benefits to disadvantaged communities, including improvements to human health and the environment, the local economy, social conditions, and the welfare of residents in such communities.

Applicants should follow the instructions in Appendix B of this announcement for calculating emissions reductions and cost effectiveness.

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
- 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. Additional details on reporting requirements are included in Section VI.D. It is expected that the description of performance measures will directly relate to the project outcomes and outputs.

The description of the performance measures should directly relate to the project's outcomes and outputs, including but not limited to:

- Overseeing subrecipients, and/or contractors and vendors
- Tracking and reporting project progress on expenditures and purchases
- Tracking, measuring, and reporting accomplishments and proposed timelines/milestones
- Tracking and reporting project progress on installations/replacements by maintaining an accurate project fleet description
- 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 long term results of the project?
- 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?

# D. Statutory Authority & Assistance Listings

The Diesel Emissions Reduction Act Program is authorized by Title VII, Subtitle G of the Energy Policy Act of 2005, 42 USC 16131, et seq., as amended. DERA authorizes the award of grants to reduce diesel emissions and diesel emissions exposure, particularly from fleets operating in areas designated by the Administrator as poor air quality areas. 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.

## E. Additional Provisions for Applicants Incorporated into the Solicitation

Additional provisions that apply to Sections III, IV, V, and VI of this solicitation and/or awards made under this solicitation, can be found at <u>EPA Solicitation Clauses</u>. These provisions are important for applying to this solicitation and applicants should review them when preparing applications for this solicitation. If you are unable to access these provisions electronically at the website above, please contact <u>dera@epa.gov</u> listed in Section VII of this solicitation to obtain the provisions.

### II. FEDERAL AWARD INFORMATION

# A. Amount of Funding Available

The total estimated funding expected to be available for awards under this competitive opportunity is approximately \$115 million; \$58 million funded with FY 2022 funding and \$57 million funded with FY 2023 funding. Funding is dependent upon agency appropriations, funding availability, Agency priorities, and other considerations. Individual applications requesting EPA funding more than the amount specified below will not be considered. Please see section IV.B. of this NOFO for more information on EPA's ten regions.

Applicants must request funding at or below the maximum funding request amount listed for the EPA regional office which covers their geographic project location. The term "project location" as used in this NOFO refers to the area(s) where the affected vehicles or engines operate. See Section IV.B. for additional information on project location and the geographic boundaries for each EPA regional office. DERA national grant funding is dispersed amongst the ten EPA regional offices by a formula based on: 1) the percentage of the population that is living in PM<sub>2.5</sub> and Ozone nonattainment areas that are attributable to the region, and 2) the percentage of the total NOx and diesel PM emissions from mobile sources that are attributable to the region.

Table 3. Total Funding and Funding Limits by Region

Region	Total Anticipated Funding Per Region	Maximum Federal Funding Request Per Application
1	\$6,200,000	\$2,000,000
2	\$11,400,000	\$3,500,000
3	\$11,900,000	\$3,500,000
4	\$11,800,000	\$2,500,000
5	\$13,900,000	\$4,000,000
6	\$14,000,000	\$3,000,000
7	\$8,000,000	\$3,500,000
8	\$9,700,000	\$3,000,000
9	\$22,200,000	\$4,500,000
10	\$6,200,000	\$1,500,000
TOTAL	\$115,300,000	-

#### **B.** Number and Amount of Awards

It is anticipated that approximately 4-10 cooperative agreements per EPA region will be made from this announcement subject to the availability of funds, the quantity and quality of applications received, agency priorities, and other applicable considerations. If EPA selects multiple applications from an applicant, EPA may combine the selected applications into one grant award for the successful applicant (See Section VI.A.1. Combining of Successful Applications into One Award).

# C. Partial Funding

In appropriate circumstances, EPA reserves the right to partially fund applications by funding discrete portions of proposed projects. If EPA decides to partially fund an application, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the application is evaluated and selected for award, thereby maintaining the integrity of the competition and selection process.

#### D. Additional Awards

EPA reserves the right to make additional awards under this solicitation, consistent with Agency policy and guidance, if additional funding becomes available after the original selections are made. Any additional selections for awards will be made no later than 6 months after the original selection decisions.

In addition, EPA reserves the right to reject all applications and make no awards under this announcement or to make fewer awards than anticipated.

### E. Period of Performance

The estimated project period for awards resulting from this solicitation is 24 months, however project periods of up to 48 months will be allowed where justified by the activities, timeline, and milestones detailed in the workplan. The estimated project period of performance start date for awards will begin starting July 1, 2024.

# F. Funding Type

The funding for selected projects will be in the form of a cooperative agreement. Cooperative agreements provide for substantial involvement between the EPA project officer and the selected applicants in the performance of the work supported. Although EPA will negotiate precise terms and conditions relating to substantial involvement as part of the award process, the anticipated substantial federal involvement for these projects may include:

- Close monitoring of the successful applicant's performance to verify the results proposed by the applicant
- Collaboration during performance of the scope of work

- EPA prior review or approval of project phases or the substantive provisions of proposed contracts found within the scope of the cooperative agreement
- In accordance with 2 CFR § 200.317 and 2 CFR § 200.318, review of proposed procurement
- Approving qualifications of key personnel (EPA will not select employees or contractors employed by the award recipient)
- Review and comment on reports prepared under the cooperative agreement (the final decision on the content of reports rests with the recipient)

EPA does not have the authority to select employees or contractors employed by the recipient. The final decision on the content of reports rests with the recipient.

#### III. ELIGIBILITY INFORMATION

Note: Additional provisions that apply to this section can be found at EPA Solicitation Clauses.

# A. Eligible Entities

In accordance with Assistance Listing 66.039, and <u>EPA's Policy for Competition of Assistance</u> Agreements (<u>EPA Order § 5700.5A1</u>), the following entities are eligible to apply:

- 1. A regional, state (including the District of Columbia), or local agency, Tribal agency, or port authority, which has jurisdiction over transportation or air quality. School districts, municipalities, metropolitan planning organizations (MPOs), cities, and counties are all generally eligible entities under this assistance agreement program to the extent that they fall within this definition.
- **2.** A nonprofit organization or institution that:
  - **a.** represents or provides pollution reduction or educational services to persons or organizations that own or operate diesel fleets; or
  - **b.** has, as its principal purpose, the promotion of transportation or air quality.

Non-profit organization, as defined by 2 CFR 200.1, means any corporation, trust, association, cooperative, or other organization that: (1) is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest; (2) is not organized primarily for profit; and (3) uses its net proceeds to maintain, improve and/or expand its operations.

Note that 2 CFR Part 200 specifically excludes the following types of organizations from the definition of "non-profit organization" because they are separately defined in the regulation: (i) institutions of higher education; and (ii) state, local and federally-recognized Indian Tribal governments. While not considered to be a "non-profit organization(s)" as defined by 2 CFR 200.1, Institutions of Higher Education are, nevertheless, eligible to submit applications under

this NOFO to the extent they fall within the definition in 2.a. and b., above. Hospitals operated by state, Tribal, or local governments or that meet the definition of nonprofit at 2 CFR 200.1 are also eligible to apply. For-profit colleges, universities, trade schools, and hospitals are not eligible to apply.

For-profit organizations are <u>not</u> an eligible entity for this funding opportunity. Additionally, non-profit organizations described in Section 501(c)(4) of the Internal Revenue Code that engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act of 1995 <u>are not eligible to apply</u>.

Eligible Tribal agencies are defined as Federally recognized Indian tribal governments, which are any Indian tribe, band, nation, or other organized group or community (including Alaska Native Villages) certified by the Secretary of the Interior as eligible for the special programs and services provided through the Bureau of Indian Affairs, as well as any organization or intertribal consortium that represents federally recognized tribes.

For the purposes of this NOFO, "intertribal consortium" is defined as a partnership between two or more eligible Tribal agencies as defined above, that is authorized by the governing bodies of those tribes to apply for and receive assistance under this program. Intertribal consortia are eligible to receive assistance under this program only if the consortium demonstrates that all members of the consortium meet the eligibility requirements for the program and authorize the consortium to apply for and receive assistance by submitting to EPA documentation of (1) the existence of the partnership between Indian tribal governments, and (2) authorization of the consortium by all its members to apply for and receive the assistance.

# **B.** Cost Sharing

Any form of cost share, mandatory or voluntary, must be included in the budget detail portion of the project narrative, and the application must describe how and when the applicant will obtain the cost share and how the cost share funding will be used. Applicants may use their own funds or other sources for cost share if the standards of 2 CFR Part 200, as applicable, are met. If the proposed cost share is to be provided by a named project partner, a letter of commitment is required. Only eligible and allowable costs may be used for cost share.

Please note: DERA funds may not be used to meet mandatory cost sharing requirements for projects funded with environmental mitigation funds resulting from federal settlements (e.g., Volkswagen Environmental Mitigation Trust). Further, federal environmental mitigation funds may not be used to meet non-federal mandatory cost share requirements of any DERA grant.

1. Mandatory Cost Share Requirement: Projects are subject to the funding limitations and mandatory cost share requirements shown in Table 4, below.

**Table 4: Cost Share Requirements** 

1 able 4: Cost Share Requirements							
Eligible Technologies	EPA Funding	Mandatory					
Eligible Technologies	Limit	Cost Share					
Drayage Truck Replacement	50%	50%					
Vehicle or Equipment Replacement with EPA Certified	25%	75%					
Engine	23%	/3%					
Vehicle or Equipment Replacement with CARB Certified Low	250/	650/					
NOx Engine	35%	65%					
Vehicle or Equipment Replacement with Zero-tailpipe	45%	55%					
Emission Power Source	43/0	3370					
Engine Replacement with EPA Certified Engine	40%	60%					
Engine Replacement with CARB Certified Low NOx Engine	50%	50%					
Engine Replacement with Zero-tailpipe Emission Power	600/	400/					
Source	60%	40%					
EPA Certified Remanufacture Systems	100%	0%					
EPA Verified Highway Idle Reduction Technologies when							
combined with new or previously installed exhaust after-	100%	0%					
treatment retrofit							
EPA Verified Highway Idle Reduction Technologies without	25%	75%					
new exhaust after-treatment retrofit	2370	7370					
EPA Verified Locomotive Idle Reduction Technologies	40%	60%					
EPA Verified Marine Shore Connection Systems	25%	75%					
EPA Verified Electrified Parking Space Technologies	30%	70%					
EPA Verified Exhaust After-treatment Retrofits	100%	0%					
EPA Verified Engine Upgrade Retrofits	100%	0%					
EPA Verified Hybrid Retrofit Systems	60%	40%					
· · · · · · · · · · · · · · · · · · ·	Cost						
EDAN 'C 1E 1 1A11'' D 4 C4 1 1' 1'41	differential	Cost of					
EPA Verified Fuel and Additive Retrofits when combined with	between	conventional					
new retrofit, upgrade, or replacement	conventional	diesel fuel					
	diesel fuel	_					
EPA Verified Aerodynamics and Low Rolling Resistance	100%	0%					
Tires when combined with new exhaust after-treatment retrofit	100%	U70					
Alternative Fuel Conversion	40%	60%					

Applications that include projects with mandatory cost share requirements must demonstrate on the SF-424 Application for Federal Assistance, on the SF-424A Budget Information for Non-Construction Programs, and in the project narrative how the applicant will be able to meet these minimum mandatory cost share requirements if they are selected for an award, or the application may be disqualified during the threshold eligibility review. Specifically, the mandatory cost share funds must be indicated in at least one of the following blocks in Section 18, Estimated Funding, on the SF-424: b. Applicant; c. State; d. Local; or e. Other. The mandatory cost shared funds must also be indicated on the SF 424A in Section A Column (f), Section B columns (2), (3) and/or (4), and Section C.

Cost sharing and matching requirements under \$200,000 for Insular Area applicants (the U.S. Virgin Islands, American Samoa, Guam and the Commonwealth of the Northern Mariana Islands) are waived as a matter of law as authorized by the Omnibus Territories Act, 48 U.S.C. Section 1469a. Insular Area applicants with applications that will require a cost share of \$200,000 or more are advised to contact EPA to determine if cost share requirements will be waived in whole or in part. For contact information, refer to Section VII. of the NOFO.

- 2. Voluntary Cost Sharing: Voluntary cost sharing is when an applicant voluntarily proposes to legally commit to provide costs or contributions to support the project when a cost share is not required. 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 and SF-424A. Voluntary cost share will not be evaluated under the selection criteria in Section V. If an applicant proposes a voluntary cost share, the following apply:
  - A voluntary cost share is subject to the applicable provisions of 2 CFR § 200.306, *Cost sharing or matching*.
  - 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 or cooperative agreement.

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 the performance period of the grant or cooperative agreement, EPA may reconsider the legitimacy of the award and/or take other appropriate action as authorized by 2 CFR Part 200.

#### C. Threshold Criteria

These are requirements that, if not met by the time of the application submission, will result in elimination of the application from consideration for funding. Only applications from eligible applicants (see Section III.A) that meet these all these criteria will be evaluated against the ranking criteria in Section V. of this NOFO. If necessary, EPA may contact applicants to clarify threshold eligibility questions prior to making an eligibility determination. Applicants deemed ineligible for funding consideration due to the threshold eligibility review will be notified within 15 calendar days of the ineligibility determination.

## 1. Application Submission

a. Applications must substantially comply with the application submission instructions and requirements set forth in Section IV of this solicitation or else they will be rejected. However, where a page limit is expressed in Section IV with respect to the application, or parts thereof, pages in excess of the page limitation will not be reviewed. Applicants are advised that readability is of paramount importance and should take precedence in application format, including selecting a legible font type and size for use in the application.

- b. In addition, initial applications must be submitted through Grants.gov as stated in Section IV of this solicitation (except in the limited circumstances where another mode of submission is specifically allowed for as explained in Section IV) on or before the application submission deadline published in Section IV of this solicitation. Applicants are responsible for following the submission instructions in Section IV of this solicitation to ensure that their application is timely submitted. Please note that applicants experiencing technical issues with submitting through Grants.gov should follow the instructions provided in Section IV, which include both the requirement to contact Grants.gov and email a full application to EPA prior to the deadline.
- c. Applications submitted outside of Grants.gov will be deemed ineligible without further consideration unless the applicant can clearly demonstrate that it was due to EPA mishandling or technical problems associated with Grants.gov or SAM.gov. An applicant's failure to timely submit their application through Grants.gov because they did not timely or properly register in SAM.gov or Grants.gov will not be considered an acceptable reason to consider a submission outside of Grants.gov.
- **2.** Applications must support Goal 1, "Tackle the Climate Crisis" Objective 1.1, "Reduce Emissions that Cause Climate Change," of EPA's Strategic Plan described in Section I.C.
- **3.** Individual applications which request EPA assistance funds above the applicable regional amounts specified in Section II.A. of this NOFO are not eligible and will not be reviewed.
- **4.** Individual applications which request EPA assistance funding from more than one EPA regional office are not eligible and will not be reviewed. If an applicant submits more than two applications requesting funding from the same EPA regional office, EPA will contact the applicant to determine which application to review.
- **5.** Applications that do not demonstrate compliance with the mandatory cost share requirements described in Section III.B.1. of this NOFO are not eligible and will not be reviewed.
- **6. Multiple Application Submission**: If the applicant is submitting multiple applications, each application must include a different project(s) and must be submitted separately. Applicants cannot include the same project(s) in multiple applications. If an applicant submits more than one application that requests funding for the same project, the applicant will be contacted prior to EPA review of any of the applications to determine which application(s) the applicant will withdraw from the competition.
- 7. Eligible and Ineligible Activities. If an application is submitted that includes any ineligible costs, tasks, or activities, that portion of the application will be ineligible for funding and may, depending on the extent to which it affects the application, render the entire application ineligible for funding. Activities must meet the following requirements to be eligible for funding:
- **8. Project Eligibility Criteria:** Applications must include projects which meet the eligibility criteria defined in the tables below.

Table 5: Medium and Heavy-Duty Truck, Transit Bus, and School Bus Project Eligibility

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Verified Idle Engine Reduction, Tires, or Aerodynamics Vehicle or Engine Replacement: EMY 2021+ (2017+ for Drayage)		Vehicle or Engine Replacement: EMY 2021+ Zero Emission <sup>2</sup> or Low-NOx <sup>3</sup>	Clean Alternative Fuel Conversion
older - 2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007 - 2009	No	No	Yes	Yes <sup>1</sup>	Yes	Yes	Yes
2010 - newer	No	No	No	Yes <sup>1</sup>	No	Yes	Yes

<sup>&</sup>lt;sup>1</sup>Auxiliary power units and generators are not eligible on vehicles with EMY 2007 or newer.

**Table 6. Nonroad Engine Project Eligibility** 

Current Engine Tier	Compression Ignition			Spark Ignition	Zero Emission <sup>3</sup>	Verified Retrofit
	Tier 0-2	Tier 3-4i	Tier 4	Tier 2	Emission	
Unregulated – Tier 2	No	Yes <sup>1</sup>	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes
Tier 4	No	No No No Yes		Yes	No	
		Verified				
Current Engine Tier	Com	pression Ign	ition	Spark Ignition	Zero Emission <sup>4</sup>	Engine Upgrade
	Tier 0-2	Tier 3-4i	Tier 4	Tier 2	Emission	Opgrade
Unregulated – Tier 2	No	Yes <sup>2</sup>	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	Yes	No

<sup>&</sup>lt;sup>1</sup>Tier 3 and Tier 4 interim (4i) allowed for vehicle/equipment replacement only when Tier 4 final is not yet available from OEM for 2021 model year equipment under the Transition Program for Equipment Manufacturers (TPEM). <sup>2</sup>Tier 3 and Tier 4i engines may be used for engine replacement with approved best achievable technology analysis. <sup>3</sup>Eligible fuel cell projects are limited to hydrogen fuel cell equipment replacements for eligible terminal

**Table 7: Marine Engine Project Eligibility** 

Engine	Engine	Current	Engine & Ves	Certified	Verified
Cate-	Horse-	Engine	Compression	Re-	Engine
gory	power	Tier	Ignition	manu-	Upgrade

<sup>&</sup>lt;sup>2</sup>Eligible fuel cell projects are limited to hydrogen fuel cell engine replacements for eligible urban transit buses, shuttle buses and drayage trucks, and hydrogen fuel cell vehicle replacements for eligible urban transit buses, shuttle buses, and drayage trucks.

<sup>&</sup>lt;sup>3</sup> Please see the Low-NOx Engine Factsheet found on the <u>DERA National Grants</u> website for guidance on identifying engines certified to meet CARB's Optional Low NOx Standards.

tractors/yard hostlers, stationary generators, and forklifts.

<sup>&</sup>lt;sup>4</sup>Fuel cell engine replacement is not eligible.

			Tier 1-2	Tier 3	Tier 4			facture System <sup>3</sup>	
C1, C2	<803	Un- regulated – Tier 2	No	Yes	No	Yes	Yes	Yes	Yes
C1, C2	≥804	Un- regulated – Tier 2	No	Yes <sup>1</sup>	Yes	Yes	Yes	Yes	Yes
C1, C2	<803	Tier 3	No	No	No	Yes	Yes	No	No
C1, C2	≥804	Tier 3	No	No	Yes	Yes	Yes	No	No
C1, C2	≥804	Tier 4	No	No	No	No	No	No	No
С3	All	Un- regulated - Tier 2	No	Yes	No	No	No	No	No
C3	All	Tier 3	No	No	No	No	No	No	No

<sup>&</sup>lt;sup>1</sup>Tier 3 engines may be used for engine replacement with approved best achievable technology analysis. Over 800 HP, Tier 3 engines are not eligible for full vessel replacement.

**Table 8: Locomotive Engine Project Eligibility** 

Current Locomotive		_	& Locon placemer		Verified	Idle- Reduction <sup>2</sup>	Certified Remanufacture System <sup>4</sup>	
Tier	Tier 0-2+	Tier 3	Tier 4	Zero Emission <sup>1</sup>	Retrofit	Technology		
Unregulated - Tier 2+	No	Yes <sup>3</sup>	Yes	Yes	Yes	Yes	Yes	
Tier 3	No	No	Yes	Yes	Yes	Yes	Yes	
Tier 4	No No No No		No	No	Yes	No		

<sup>&</sup>lt;sup>1</sup>Fuel cell engine and locomotive replacements are not eligible.

Note: Tier 0+, Tier 1+, Tier 2+, Tier 3, and Tier 4 represent locomotives manufactured or remanufactured under the more stringent Tier standards promulgated under the 2008 (current) locomotive and marine rule. Tier 0, Tier 1, and Tier 2 represent locomotives originally manufactured or remanufactured under the less stringent Tier standards promulgated in 1997.

7. Best Achievable Technology (BAT): All new nonroad and locomotive engines are now manufactured to meet the EPA Tier 4 standards. All new Category 1 and 2, 804 horsepower and above marine engines are now manufactured to meet the EPA Tier 4 standards. Applicants replacing nonroad, marine, and locomotive engines with internal combustion

<sup>&</sup>lt;sup>2</sup>Fuel cell engine and vessel replacements are not eligible.

<sup>&</sup>lt;sup>3</sup>Some marine engine projects may be subject to the restriction on mandated measures.

<sup>&</sup>lt;sup>2</sup>Automatic engine start-stop technologies are only eligible to be installed on locomotives currently certified to Tier 0 or unregulated, subject to the restriction on mandated measures.

<sup>&</sup>lt;sup>3</sup>Tier 3 engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in Section III.D.2.b., below. Tier 3 is not eligible for locomotive replacement.

<sup>&</sup>lt;sup>4</sup>Some locomotive engine projects may be subject to the restriction on mandated measures.

engines must demonstrate in their application that they commit to using Tier 4 engines if Tier 4 engines with the appropriate physical and performance characteristics are available. Applicants anticipating the use of Tier 3 engines should discuss their rationale for proposing lower tiered engine replacements in their application.

If selected for funding, recipients must submit a best achievable technology analysis to EPA for approval before Tier 3 or Tier 4i vehicles, equipment, or engines can be purchased, as defined below. The following analysis is not required at the time of application submittal.

## a. BAT Analysis Requirements:

- i. The analysis must be prepared by the engine manufacturer or installer.
- ii. Using good engineering judgment, the engine manufacturer or installer must determine that no internal combustion engine certified to Tier 4 is produced by any manufacturer with the appropriate physical or performance characteristics to replace the existing engine in the equipment.
- iii. If the engine manufacturer or installer determines that no internal combustion engine certified to Tier 4 is available with the appropriate performance characteristics, explain why certified Tier 4 engines produced by them and other manufacturers cannot be used as a replacement because they are not similar to the engine being replaced in terms of power or speed.
- iv. If there are available internal combustion engines with the appropriate performance characteristics but the engine manufacturer or installer determines that no engine certified to Tier 4 is available with the appropriate physical characteristics, explain why certified internal combustion engines produced by them and other manufacturers cannot be used as a replacement because their weight or dimensions are substantially different than those of the engine being replaced, or because they will not fit within the equipment's engine compartment.
- v. In evaluating appropriate physical or performance characteristics, the engine manufacturer or installer may account for compatibility with equipment components that would not otherwise be replaced when installing a new engine, including but not limited to transmissions or reduction gears, drive shafts, cooling systems, operator controls, or electrical systems. If the engine manufacturer or installer makes their determination on this basis, they should identify the equipment components that are incompatible with internal combustion engines certified to Tier 4 and explain how they are incompatible and why it would be unreasonable to replace them.
- vi. Identify the proposed Tier 3 or Tier 4i engines to be used and discuss the physical and performance characteristics of the engines that will ensure compatibility with the existing equipment. Quantify proposed emission reductions, PM cost effectiveness and NOx cost effectiveness for the proposed options.

- vii. DERA project eligibility or approval does not supersede any regulatory requirements for equipment owners, operators, manufactures, installers and others, including but not limited to 40 CFR §1068.240, §1042.615, and §1033.601.
- viii. Costs for design and engineering analysis may be included in the project budget.
- **8.** Ownership, Usage and Remaining Life Requirements: To be eligible for funding, vehicles and equipment targeted for upgrades must meet certain ownership, usage, and remaining life requirements. Applicants should demonstrate in their application that all funded vehicles and equipment will meet the criteria defined in 1) 5), below.

If selected for funding, participating fleet owners must attest to each criterion in 1) - 5), below in a signed eligibility statement which includes each vehicle make, model, year, vehicle identification number, odometer/usage meter reading, engine make, model, year, horsepower, engine ID or serial number, and vehicle/equipment registration/licensing number and state. This documentation must be submitted as part of the grantees programmatic reporting to EPA to verify the eligible use of grant funds. A sample eligibility statement may be found on the <u>DERA National Grants</u> website. The signed eligibility statement is not required at the time of application submittal.

- a. **Operational:** The existing vehicle, engine, or equipment must be fully operational. Operational equipment must be able to start, move, and have all necessary parts to be operational.
- b. **Ownership:** The participating fleet owner must currently own and operate the existing vehicle or equipment and have owned and operated the vehicle during the two years prior to upgrade.
- c. Remaining Life: The existing vehicle, engine, or equipment must have at least three years of remaining life at the time of upgrade. Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding. The remaining life estimate is the number of years of operation remaining even if the unit were to be rebuilt or sold to another fleet. The remaining life estimate depends on the current age and condition of the vehicle at the time of upgrade, as well as things like usage, maintenance, and climate.
- d. **Highway Usage:** The mileage of two or more units may be combined to reach the thresholds below where two or more units will be scrapped and replaced with a single unit.
  - i. To be eligible for funding, the existing certified highway engine/vehicle must have accumulated at least 7,000 miles/year during the two years prior to upgrade.

- ii. Exception: If an applicant can demonstrate that a certified highway engine/vehicle is being used in a predominately nonroad application (e.g., firetrucks or utility trucks that idle for long periods to power an auxiliary apparatus), engine operating hours as defined below in "nonroad usage" may be used for application eligibility purposes. If selected for award, EPA will review and approve eligibility on a case-by-case basis.
- e. **Nonroad Usage:** The engine operating hours of two or more units may be combined to reach the thresholds below where two or more units will be scrapped (see Section e., below) and replaced with a single unit.
  - i. Agricultural Pumps: To be eligible for funding, nonroad agricultural pumps must operate at least 250 hours/year during the two years prior to upgrade.
  - ii. All Other Nonroad Engines: To be eligible for funding, nonroad engines should operate at least 500 hours/year during the two years prior to upgrade.
  - iii. Exception: If an applicant can demonstrate that a nonroad engine/vehicle is being used in a predominately highway application, vehicle mileage as defined above in "highway usage" may be used for application eligibility purposes. If selected for award, EPA will review and approve eligibility on a case-by-case basis.
- f. **Locomotive and Marine Usage**: The engine operating hours of two or more units may be combined to reach the thresholds below where two or more units will be scrapped (see Section e., below) and replaced with a single unit. To be eligible for funding the existing locomotive and marine engines must operate at least 1,000 hours/year during the two years prior to upgrade.

## **9.** Vehicle and Equipment Costs

1) Vehicles, Engines, and Equipment: Eligible project costs include the purchase price of eligible vehicles, engines and equipment as defined in Sections I.B. and III.D.

### 2) Vehicle and Equipment Replacement Projects:

a) To be eligible for funding, replacement highway vehicles must be certified by EPA and/or CARB to meet applicable emission standards. To be eligible for funding, replacement nonroad equipment, locomotives and marine vessels must be powered by engines certified to EPA and/or CARB emission standards. However, zero tailpipe emissions nonroad equipment, marine vessels, and locomotives do not require EPA or CARB certification. EPA's annual certification data for vehicles, engines, and equipment may be found at EPA's Annual Certification Data for Vehicles, Engines, and Equipment website. EPA's engine emission standards may be found at EPA's All EPA Emission Standards website. Engines certified by CARB may be found by searching CARB's Executive Orders for Heavy-duty Engines and Vehicles, found on CARB's New Vehicle and Engine Certification website. Please see the Low NOx Certified

- Engines Factsheet found on the <u>DERA National Grants</u> website for guidance on identifying engines certified to meet CARB's Optional Low NOx Standards.
- b) To be eligible for funding the replacement vehicle or equipment must be of similar type and gross vehicle weight rating or horsepower as the vehicle, engine, or equipment being replaced.
  - i. Nonroad: Horsepower increases of more than 40 percent 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.
  - ii. Highway: The replacement vehicle must not be in a larger weight class than the existing vehicle. Exceptions may be granted for vocational purposes and require specific EPA approval prior to purchase.
- c) The replacement vehicle, engine, or equipment must continue to perform similar function and operation as the vehicle, engine, or equipment that is being replaced.
- **d)** The replacement vehicle must resemble the replaced vehicle in form and function. The cost of optional components or "add-ons" that significantly increase the cost of the vehicle may not be eligible for funding under the grant.

# 3) Battery Electric Powered Replacement Projects:

- a) Eligible costs include the purchase and installation of one charging unit per vehicle, including the unit and charging cable, mount and/or pedestal.
- b) Funding under this NOFO cannot be used for power distribution to the pedestal, electrical panels and their installation, upgrades to existing electrical panels or electrical service, transformers and their installation, wiring/conduit and its installation, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation. Please note that although DERA grant funds and matching funds cannot be used for stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and DERA grant funds and matching funds cannot be used for on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation, applicants and their partners may add these components at their own expense outside the scope of the grant.

#### 4) Grid Electric Powered Replacement Projects:

- a) Eligible costs include the purchase and installation of certain equipment required for power delivery directly related to the new equipment. Eligible costs include design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation.
- b) Funding under this NOFO cannot be used for power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation. Please note that although DERA grant funds and matching funds cannot be used for stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and DERA

grant funds and matching funds cannot be used for on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation, applicants and their partners may add these components at their own expense outside the scope of the grant.

### 5) Engine Replacement Projects:

- a) To be eligible for funding, replacement highway, nonroad, marine and locomotive engines must be certified to EPA and/or CARB emission standards. However, nonroad engine, locomotive engine, and marine engine zero tailpipe emissions engine replacements do not require EPA or CARB certification. Please reference EPA's Annual Certification Data for Vehicles, Engines, and Equipment, EPA's engine Emission Standards, and CARB's Executive Orders for Heavy-duty Engines and Vehicles. Please see DERA's Low-NOx Engine Factsheet for guidance on identifying engines certified to meet CARB's Optional Low NOx Standards.
- b) Eligible costs include equipment and parts included in the certified engine configuration and/or are required to ensure the effective installation and functioning of the new technology such as design and engineering, parts and materials, and installation.
- c) For engine replacement with battery, fuel cell, and grid electric, eligible costs include 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 and fuel cell stack assemblies.
- **d)** Funding under this NOFO cannot be used to replace cabs, axles, paint, brakes, or mufflers.
- e) To be eligible for funding the replacement engine must be of similar horsepower as the engine being replaced.
  - i. Nonroad: Horsepower increases of more than 40 percent 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.
  - ii. Highway: The replacement vehicle must not be in a larger weight class than the existing vehicle. Exceptions may be granted for vocational purposes and require specific EPA approval prior to purchase.

## 6) Engine Remanufacture System Projects:

- a) To be eligible for funding, remanufacture systems for locomotives and marine engines must be certified by EPA at the time of acquisition. The list of certified remanufacture systems are available at <a href="Annual Certification Data for Vehicles">Annual Certification Data for Vehicles</a>, <a href="Engines">Engines</a>, and <a href="Equipment">Equipment</a> and additional information on remanufacture systems is available at <a href="EPA's Marine Remanufacturing Program: Maintaining Compliance when Rebuilding Category 1 and 2 Marine Diesel Engines">Maintaining Compliance when Rebuilding Category 1 and 2 Marine Diesel Engines</a>.
- b) Eligible costs include the associated labor costs for installation of the system.
- c) Funding under this NOFO cannot be used for the entire cost of an engine rebuild if a certified remanufacture system is applied at the time of rebuild; the funds may

only be used for the cost of the certified remanufacture system and associated labor costs for installation of the kit.

### 7) Idle Reduction Projects:

- a) Eligible costs for idle reduction technologies that are installed on the vehicle can include the associated labor costs for installation of the system.
- b) To be eligible for funding technologies must be on <u>EPA's SmartWay Verified</u> Technologies list at the time of acquisition.

## 8) Electrified Parking Space Projects:

- **a)** Eligible costs include the purchase and installation of certain equipment required for power delivery directly related to the new equipment such as design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation.
- b) Funding under this NOFO cannot be used for power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.

## 9) Locomotive Shore Power Connection Projects:

- a) Eligible costs include the purchase and installation of certain equipment required for power delivery directly related to the new equipment such as design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation.
- b) Funding under this NOFO cannot be used for power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.

# 10) Marine Shore Power Connection Projects:

- **a)** Funding may support new installations, or expansions of existing shore power systems
- **b)** To be eligible for funding, marine shore power projects must meet the following criteria:
  - i. Applicants must attest to compliance with international shore power design standards (IEC/ISO/IEEE 80005-1:2019/ AMD 1:2022 High Voltage Shore Connection Systems or the I IEC/ISO/IEEE 80005-1:2019/AMD 1:2022 Low Voltage Shore Connection Systems).
  - **ii.** Shore power connection systems must be supplied with electricity from the local utility grid.
- iii. Demonstration that the proposed system has the capacity, demand, and commitment to be used for more than 1,000 megawatt-hours per year. Smaller projects will be considered if the applicant can demonstrate cost effectiveness.

- iv. Due to the unique nature and custom design of marine shore power connection systems, EPA must review and approve marine shore power connection systems on a case-by-case basis. If the project application is selected for funding, the final design of the marine shore power connection system requires specific EPA approval prior to purchase and installation.
- v. Applicants must commit to reporting usage information to EPA for five years after the system is operational.
- vi. Shore power capable vessels docked at a berth where shore power is available must be required to turn off the vessel's engines and use the shore power system, with limited exceptions for extreme circumstances.
- vii. Eligible costs include the purchase and installation of the shore side equipment and certain equipment required for power delivery directly related to the new equipment such as design and engineering, cables, cable management systems, shore power coupler systems, distribution control systems, grounding switches, service breakers, capacitor banks, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation.
- viii. Funding under this NOFO cannot be used for shipside modifications to accept shore-based electrical power, power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.

## 11) Retrofit Projects:

- a) Eligible costs include the associated labor costs for installation of the system, design and engineering, DPF cleaning machines, extra DPFs for maintenance rotation, replacement CCV filters, and filter cleaning contracts during grant open period.
- b) To be eligible for funding, verified retrofit technologies must be on <u>EPA's</u> or <u>CARB's</u> Verified Technologies lists at the time of acquisition, must be used only for the vehicle/engine application specified on the lists, and must meet any applicable verification criteria.

  EPA will not fund stand-alone cleaner fuel/additive use. To be eligible for
  - funding, verified fuels and additives must be for new or expanded use, and must be 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, vehicle, or equipment replacement funded under this NOFO.

#### 12) Alternative Fuel Vehicle Conversion Projects:

- a) Eligible costs include the associated labor costs for installation of the system.
- b) To be eligible for funding, alternative fuel conversion systems must be certified by EPA and/or CARB or must be approved by EPA for Intermediate-Age engines. See <a href="EPA's">EPA's</a> lists of "Certified Conversion Systems for New Vehicles and Engines" and "Conversion Systems for Intermediate-Age Vehicles and Engines" and <a href="CARB's">CARB's</a> list of "Approved Alternate Fuel Retrofit Systems."

- c) To be eligible for funding, conversion systems for engine model years 2006 and earlier must achieve at least a 30% NOx reduction and a 10% PM reduction from the applicable certified emission standards of the original engine.
- d) To be eligible for funding, conversion systems for engine model years 2007 and newer must achieve at least a 20% NOx 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.

## 13) Aerodynamics and Low Rolling Resistance Tire Projects:

- a) Eligible costs include the associated labor costs for installation. Eligible costs can include single-wide wheels only when a fleet is retrofitting from standard dual tires to SmartWay-verified single-wide low rolling resistance tires.
- **b)** Funding under this NOFO cannot be used to replace steel wheels with aluminum wheels of the same configuration (singles or duals).
- c) To be eligible for funding, technologies must be on <u>EPA's verified aerodynamic technologies list</u> and <u>verified list for low rolling resistance new and retread tire technologies list</u> at the time of acquisition, must be used only for the application specified on the lists, and must meet any applicable verification criteria.
- **d)** EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. To be eligible for funding, these technologies must be combined on the same vehicle with the new installation of an exhaust after-treatment retrofit funded under this NOFO.
- 14) Stationary Energy Storage and Power Generation Projects: Funding under this NOFO, including matching funds, cannot be used for stationary energy storage systems that power the equipment (e.g., batteries) and their installation or on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation. Applicants and their partners may add these components at their own expense outside the scope of the grant.
- **15) Replacement Technologies:** Funding under this NOFO cannot 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.
- 10. Scrappage: The vehicle, equipment, and/or engine being replaced must be scrapped or rendered permanently disabled within ninety (90) days of being replaced.
  - i. 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 require prior EPA approval.

- ii. 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 require prior written approval from the EPA project officer.
- iii. 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 disabled engines, disabled vehicles, disabled equipment, or parts are to be sold, program income requirements apply.
- iv. Alternative Scrappage Options:
  - 1. If a 2010 engine model year (EMY) or newer highway vehicle is replaced, the 2010 EMY or newer vehicle may be retained or sold if the 2010 EMY or newer vehicle will replace a pre-2009 EMY vehicle, and the pre-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. All existing and replacement vehicles are subject to the funding restrictions in this section of the NOFO. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and requires prior EPA approval.
  - 2. If a Tier 2, Tier 3, or Tier 4 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, 3, or 4 unit currently operates, however alternative scenarios will be considered. All existing and replacement equipment are subject to the funding restrictions in this section of the NOFO. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and requires prior EPA approval.
- v. For tire replacement projects, the original tires must be scrapped according to local or state requirements.
- vi. Evidence of appropriate disposal is required in a final assistance agreement report submitted to EPA. Participating fleet owners must attest to the appropriate disposal in a signed scrappage statement. A sample scrappage statement may be found on the <a href="DERA National Grants">DERA National Grants</a> website. The scrappage statement must include:
  - 1. Vehicle owner's name and address;
  - 2. Vehicle make, vehicle model, vehicle model year, VIN, odometer reading or usage meter reading, engine make, engine model, engine model year, engine horsepower, engine ID or serial number, as applicable;
  - 3. Name, address, and signature of dismantler;
  - 4. Date engine and/or vehicle/equipment was scrapped;
  - 5. Statement attesting to scrappage of vehicle/engine as defined above;
  - 6. Signature of participating fleet owner.
  - 7. Digital photos as follows:
    - Side profile of the vehicle, prior to disabling;
    - VIN tag or equipment serial number;
    - Engine label (showing serial number, engine family number, and engine model year);

- Engine block, prior to hole;
- Engine block, after hole;
- Cut frame rails or other cut structural components, as applicable;
- Others, as needed
- 2. **Project Implementation Costs:** Eligible project costs include those costs directly related to the implementation, management, and oversight of the project, including recipient and subrecipient personnel and benefits, equipment, contractual, travel, supplies, subgrants and rebates, and indirect costs.
- 3. **Mechanic and Driver Training:** Eligible project costs can include mechanic/driver training related to the maintenance and operation of new technologies.
- 4. Truck DPF Maintenance: Eligible costs for truck replacement projects include 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 trucks. Funding for required maintenance is available for the duration of the project period.
- 5. **Federal Matching Funds**: Funding under this NOFO cannot be included as a cost or used to meet cost sharing or matching requirements of any other federally financed grant, as required under 2 CFR 200.306(b)(5) and 2 CFR 200.403(f). This includes funds received under EPA's DERA State Grants Program and federal Supplemental Environmental Project funds.
- 6. **Expenses Incurred Prior to the Project Period**: Funding under this NOFO cannot be used to cover expenses incurred prior to the project period set forth in any assistance agreement funded under this NOFO, 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.
- 7. **Emissions Testing**: Funding under this NOFO cannot be used for emissions testing and/or air monitoring activities (including the acquisition cost of emissions testing equipment), research and development, or technology demonstration, commercialization, certification, or verification.
- 8. **Fueling Infrastructure**: Funding under this NOFO cannot 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.
- 9. **Mandated Measures**: Funding under this NOFO cannot be used to fund the costs of emissions reductions that are mandated under federal law pursuant to 42 U.S.C. 16132(d)(2).
- 10. **Leasing**: Funding under this NOFO cannot be used for leasing vehicles, engines, or equipment. If financing is necessary, the purchase should be financed with a conventional purchase loan.

11. **Buy America Requirements:** Certain projects under this competition are subject to the Buy America Sourcing requirements under the Build America, Buy America (BABA) provisions of the <u>Infrastructure Investment and Jobs Act (IIJA)</u> (P.L. 117-58, §§70911-70917) when using Federal funds for the purchase of goods, products, and materials on any form of construction, alteration, maintenance, or repair of infrastructure in the United States. The Buy America preference applies to all of the iron and steel, manufactured products, and construction materials used for the infrastructure project under an award for identified <u>EPA financial assistance funding programs</u>. Please consider this information when preparing project and budget information.

These sourcing requirements require that all iron, steel, manufactured products, and construction materials used in Federally funded infrastructure projects must be produced in the United States. The recipient must implement these requirements in its procurements, and this article must flow down to all subawards and contracts at any tier. For legal definitions and sourcing requirements, the recipient must consult <a href="EPA's Build America, Buy America website">EPA's Build America, Buy America website</a>.

Under BABA, a Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. Onhighway vehicles/engines and non-road engines/equipment funded by this program are not considered "infrastructure." The following potentially eligible projects under this competition meet the definition of "infrastructure" and are subject to Buy America preference requirements under BABA:

- Structures, facilities, and equipment that generate, transport, and distribute energy
   including electric vehicle (EV) charging equipment
- Any other permanent public structure that meets the infrastructure definition in M-22-11. Questions regarding BABA applicability to specific projects should be submitted to DERA@epa.gov.

When supported by rationale provided in IIJA §70914, the recipient may submit a request for a BABA waiver to EPA. If selected for funding, the recipient should request guidance on submitting a BABA waiver request to EPA from the EPA Project Officer. A list of approved EPA waivers is available on the <a href="Build America, Buy America website">Build America, Buy America website</a>. Please continue to monitor this website for further BABA guidance or any future EPA-wide waivers that may impact the DERA National Grants program.

In additional to BABA requirements, all procurements under grants may be subject to the domestic preference provisions of 2 CFR 200.322. See "Build America, Buy America" clause in EPA Solicitation Clauses.

### IV. APPLICATION AND SUBMISSION INFORMATION

Note: Additional provisions that apply to this section can be found at EPA Solicitation Clauses.

# A. Requirement to Submit Through Grants.gov and Limited Exception Procedures

Applicants must apply electronically through <u>Grants.gov</u> under this funding opportunity based on the Grants.gov instructions in this announcement. If your organization has no access to the internet or access is very limited, you may request an exception for the remainder of this calendar year by following the procedures outlined <u>here</u>. Please note that your request must be received at least 15 calendar days before the application due date to allow enough time to negotiate alternative submission methods. Issues with submissions with respect to this opportunity only are addressed in section *2. Technical Issues with Submission* below.

#### 1. Submission Instructions

1. **SAM.gov** (**System for Award Management**) **Registration Instructions**: Organizations applying to this funding opportunity must have an active SAM.gov registration. If you have never done business with the Federal Government, you will need to register your organization in SAM.gov. If you do not have a SAM.gov account, then you will create an account using <u>login.gov</u> to complete your SAM.gov registration. Login.gov is a secure sign in service used by the public to sign into Federal Agency systems including SAM.gov and Grants.gov. For help with login.gov accounts you should visit <a href="http://login.gov/help">http://login.gov/help</a>. SAM.gov registration is FREE. The process for entity registrations includes obtaining Unique Entity ID (UEI), a 12-character alphanumeric ID assigned an entity by SAM.gov, and requires assertions, representations and certifications, and other information about your organization. Please review the <a href="https://entity-news.nih.gov">Entity Negistration Checklist</a> for details on this process.

If you have done business with the Federal Government previously, you can check your entity status using your government issued UEI to determine if your registration is active. SAM.gov requires you renew your registration every 365 days to keep it active.

Please note that SAM.gov registration is different than obtaining a UEI only. Obtaining an UEI only validates your organization's legal business name and address. Please review the <u>Frequently Asked Question</u> on the difference for additional details.

Organizations should ensure that their SAM.gov registration includes a current e-Business (EBiz) point of contact name and email address. The EBiz point of contact is critical for Grants.gov Registration and system functionality.

Contact the <u>Federal Service Desk</u> for help with your SAM.gov account, to resolve technical issues or chat with a help desk agent: (866) 606-8220. The Federal Service desk hours of operation are Monday – Friday 8am – 8pm ET.

2. <u>Grants.gov Registration Instructions</u>: Once your SAM.gov account is active, you must register in Grants.gov. Grants.gov will electronically receive your organization

information, such as e-Business (EBiz) point of contact email address and UEI. Organizations applying to this funding opportunity must have an active Grants.gov registration. Grants.gov registration is FREE. If you have never applied for a federal grant before, please review the <u>Grants.gov Applicant Registration</u> instructions. As part of the Grants.gov registration process, the EBiz point of contact is the only person that can affiliate and assign applicant roles to members of an organization. In addition, at least one person must be assigned as an Authorized Organization Representative (AOR). Only person(s) with the AOR role can submit applications in Grants.gov. Please review the <u>Intro to Grants.gov-Understanding User Roles</u> and <u>Learning Workspace – User Roles and Workspace Actions</u> for details on this important process.

Please note that this process can take a month or more for new registrants. Applicants must ensure that all registration requirements are met in order to apply for this opportunity through Grants.gov and should ensure that all such requirements have been met well in advance of the application submission deadline.

Contact <u>Grants.gov</u> for assistance at 1-800-518-4726 or <u>support@grants.gov</u> to resolve technical issues with Grants.gov. Applicants who are outside the U.S. at the time of submittal and are not able to access the toll-free number may reach a Grants.gov representative by calling 606-545-5035. The Grants.gov Support Center is available 24 hours a day 7 days a week, excluding federal holidays.

3. **Application Submission Process**: To begin the application process under this grant announcement, go to <u>Grants.gov</u> and click the red "Apply" button at the top of the view grant opportunity page associated with this opportunity.

The electronic submission of your application to this funding opportunity must be made by an official representative of your organization who is registered with Grants.gov and is authorized to sign applications for Federal financial assistance. If the submit button is grayed out, it may be because you do not have the appropriate role to submit in your organization. Contact your organization's EBiz point of contact or contact <u>Grants.gov</u> for assistance at 1-800-518-4726 or <u>support@grants.gov</u>.

Applicants need to ensure that the Authorized Organization Representative (AOR) who submits the application through Grants.gov and whose UEI is listed on the application is an AOR for the applicant listed on the application. Additionally, the UEI listed on the application must be registered to the applicant organization's SAM.gov account. If not, the application may be deemed ineligible.

4. **Application Submission Deadline:** Your organization's AOR must submit your complete application package electronically to EPA through <u>Grants.gov</u> no later than **Friday, December 1**<sup>st</sup>, **2023, at 11:59 PM ET**. Please allow for enough time to successfully submit your application and allow for unexpected errors that may require you to resubmit.

Applications submitted through Grants.gov will be time and date stamped electronically.

Please note that successful submission of your application through Grants.gov does not necessarily mean your application is eligible for award. Any application submitted after the application deadline time and date deadline will be deemed ineligible and not be considered.

- **2. Technical Issues with Submission:** If applicants experience technical issues during the submission of an application that they are unable to resolve, follow these procedures **before** the application deadline date:
  - a. Contact Grants.gov Support Center **before** the application deadline date.
  - **b.** Document the Grants.gov ticket/case number.
  - c. Send an email with "2022-2023 DERA National Grants" in the subject line to dera@epa.gov before the application deadline time and date and <u>must</u> include the following:
    - 1) Grants.gov ticket/case number(s)
    - 2) Description of the issue
    - 3) The entire application package in PDF format.

Without this information, EPA may not be able to consider applications submitted outside of Grants.gov. Any application submitted after the application deadline time and date deadline will be deemed ineligible and <u>not</u> be considered.

Please note that successful submission through Grants.gov or email does not necessarily mean your application is eligible for award.

EPA will make decisions concerning acceptance of each application submitted outside of Grants.gov on a case-by-case basis. EPA will only consider accepting applications that were unable to submit through Grants.gov due to <u>Grants.gov</u> or relevant <u>SAM.gov</u> system issues or for unforeseen exigent circumstances, such as extreme weather interfering with internet access. Failure of an applicant to submit prior to the application submission deadline date because they did not properly or timely register in SAM.gov or Grants.gov is <u>not</u> an acceptable reason to justify acceptance of an application outside of Grants.gov.

## 3. Application Materials

The following forms and documents are required under this announcement. Mandatory Documents:

- Standard Form 424, *Application for Federal Assistance*. Please note that the organizational Unique Entity Identifier (UEI) must be included on the SF-424.
- Standard Form 424A, Budget Information for Non-Construction Programs
- EPA Form 4700-4, Pre-Award Compliance Review Report
- EPA Form 5700-54, Key Contacts Form
- Project Narrative Attachment Form. Attach the **Project Narrative** prepared as described in Section IV.B and C. below.
  - Applicants must use the Project Narrative Attachment form in Grants.gov. The
    project narrative must explicitly describe how the proposed project meets the
    threshold eligibility criteria and address the evaluation criteria. The project
    narrative cannot exceed a maximum of (14) single-spaced typewritten pages,

including the summary page, workplan, and budget table and detail. Excess pages will not be reviewed. Supporting materials identified below can be submitted as attachments and are not included in the 14-page limit. The project narrative must substantially comply with the specific instructions, format and content as defined.

• Applicants should use the "Other Attachments" Form in Grants.gov to attach and submit the following attachments prepared as described in Section IV.D. below.

#### Applicant Fleet Sheet

• (Does NOT count towards the 14-page limit): Applicants must use the Other Attachment form in Grants.gov to upload an .xls file of their applicant fleet sheet. The purpose of the applicant fleet description is to describe in detail the specific vehicles targeted for emissions reductions to be implemented under the proposed project. Information provided in the applicant fleet sheet will be used to help determine project eligibility and for evaluation purposes as described below. Applicants are encouraged to use the sample format for the applicant fleet sheet found at: <a href="https://www.epa.gov/dera/national">https://www.epa.gov/dera/national</a>.

#### Emissions Reduction Calculations

• (Does NOT count towards the 14-page limit): Applicants must use the Other Attachment form in Grants.gov to upload calculations. Applicants should follow the instructions in Appendix B of this announcement for calculating emissions reductions. Applicants must include a copy of their Diesel Emissions Quantifier (DEQ) results spreadsheet showing DEQ results and inputs as an attachment to their application. If alternative methods are used, applicants must thoroughly describe and document their emissions reduction calculation methods in an attachment to the project narrative.

#### Partnership Letters, if applicable

• (Does NOT count towards the 14-page limit): If the proposed cost share is to be provided by a named project partner, a letter of commitment is required. If applicable, additional letters of support that demonstrate strong, long-term involvement throughout the project from a variety of project partners are encouraged. Letters should specifically indicate how project partners and supporting organizations will participate in or directly assist in the design and performance of the project, or how obtaining support from project partners will allow the applicant to perform the project more effectively. Letters should be addressed to the applicant organization and included as attachments to the application. Letters submitted by partners directly to EPA will not be accepted.

#### Mandated Measures Justification Supporting Information

• (Does NOT count towards the 14-page limit): If applicable, applicants must use the Other Attachment form in Grants.gov to upload calculations. If applicable, the application must include a clear and concise justification in Section 1 of the project narrative, for why/how the emissions reductions proposed for funding are not subject to the Restriction for Mandated Measures under this NOFO. Applicants must provide sufficient detail and information to support the justification, including maintenance schedules and history, if applicable. Please see Section III.D.2.m. and Appendix C for more information.

The following forms and documents are optional under this announcement.

#### **Optional Documents**

- In grants.gov, use the *Other Attachments Form* identified under the Mandatory Documents tab to submit the following:
  - o Negotiated Indirect Cost Rate Agreement, if applicable
  - o Maps
  - o Resumes

When saving application files, please ensure that the following characters are **not** included in the file names:  $\sim$  "#% & \*: <>? / \ { | }. Including these characters can cause problems with application files.

Applications submitted through <u>Grants.gov</u> will be time and date stamped electronically. If you wish to confirm receipt of your application from EPA (not from <u>Grants.gov</u>), please contact the Agency contact in Section VII within 30 days of the close of this solicitation.

Your organization's authorized official representative (AOR) must submit your complete application electronically to EPA through <u>Grants.gov</u> no later than **Friday**, **December 1**<sup>st</sup>, **2023**, at 11:59 PM ET.

#### **B.** EPA Region Project Location for Application Submission

Applicants must request funding from the EPA regional office which covers their geographic project location. The term "project location" as used in this NOFO refers to the area(s) where the affected vehicles or engines operate. The geographic boundaries for each EPA regional office are defined below. For long-distance fleets, the applicant must decide which region best covers the geographic project location and provide justification as to why that region was selected - whether it is the region where the fleet is based, or the region where the fleet operates the majority of the time, or other factors that would justify an award in that region.

Each application must clearly list the EPA regional office from which they are requesting funding on the cover page of the project narrative. Each application may only request funding from one EPA regional office.

The geographic boundaries for each EPA regional office are:

- **a)** Region 1 is accepting applications for projects located within Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
- **b)** Region 2 is accepting applications for projects located within New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands.
- c) Region 3 is accepting applications for projects located within Delaware, Maryland, Virginia, Pennsylvania, West Virginia, and the District of Columbia.
- **d)** Region 4 is accepting applications for projects located within Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
- e) Region 5 is accepting applications for projects located within Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

- **f)** Region 6 is accepting applications for projects located within Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
- **g)** Region 7 is accepting applications for projects located within Iowa, Kansas, Missouri, and Nebraska.
- **h)** Region 8 is accepting applications for projects located within Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
- i) Region 9 is accepting applications for projects located within California, Arizona, Nevada, Hawaii, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.
- **j)** Region 10 is accepting applications for projects located within Washington, Oregon, Idaho, and Alaska.

A map showing Regional Collaboratives and EPA Regions can be found here.

#### C. Project Narrative Instructions, Format, and Content

**Instructions:** The project narrative should substantially comply with the instructions and content described below. It should also address the evaluation criteria in Section V.A. of the NOFO. The project narrative, including the cover page, workplan, and budget table and detail, must not exceed a maximum of 14 single-spaced typewritten pages. Pages over the 14-page limit will not be reviewed.

Supporting materials, such as the applicant fleet sheet, partnership letters, and emissions calculations can be submitted as attachments and are not included in the 14-page limit. Supporting materials should be submitted using the *Other Attachments Form*, as described in Section IV.A.3. above

Applicants should ensure that their project narratives are written clearly using understandable terms. Doing so will help ensure that the evaluation team members understand the purpose, outputs, and outcomes of the proposed project.

Applicants are not required, but are highly encouraged, to use the project narrative format below.

#### (1) Cover Page:

The cover page should not exceed one page. The cover page should include the following information:

- **EPA Region** Applicants must request funding from the single EPA regional office which covers their geographic project location. See Section IV.B of the NOFO, above.
- Applicant Information
  - Applicant organization
  - Address
  - o Primary contact name, phone number, and e-mail address
  - o UEI number
- **Type of Eligible Applicant** Applicants must list their applicant type and how they meet the eligibility criteria.
  - o Regional, state, or local agency (School districts, municipalities, metropolitan

- planning organizations (MPOs), cities and counties), Tribal government (or intertribal consortium) or Alaska Native Village, or port authority, which has jurisdiction over transportation or air quality.
- Nonprofit organizations or institutions that represent or provide pollution reduction or educational services to persons or organizations that own or operate diesel fleets; or have, as their principal purpose, the promotion of transportation or air quality.
- **Project Title** One descriptive sentence only
- **Project Period of Performance:** Provide beginning and ending dates of proposed project.
- Short Project Description: Briefly describe your project in one to three sentences only, especially noting the expected outputs and outcomes. Use the applicable sector(s) and target fleet type(s) shown below in you project description. Include the type and number of affected vehicles/equipment and the type of emission upgrade(s) proposed for funding. Example descriptions: School Bus: Retrofit 40 class 6 school buses with DPFs; Freight: Install DPFs and bunk heaters on 20 Class 8 long-haul trucks; Port: Replace engines in 2 ship-to-shore gantry cranes with electric power.
- **Project Sector(s):** Use the applicable sectors(s) shown in the table below to list the sector(s) targeted for emissions reductions. Indicate primary sector, secondary sector (as appropriate), and other sectors (as appropriate).
- Target Fleets Use the applicable sectors(s) shown in the table below to list the sector(s) targeted for emissions reductions. Indicate primary sector, secondary sector (as appropriate), and other sectors (as appropriate).
- **Budget Summary:** Include the following information:
  - o EPA Funding
  - Mandatory Cost Share & Source
  - Voluntary Costs Share & Source (if applicable)
  - Total Project Cost

As noted in Section II.A. of the NOFO, each application can request EPA funding up to the individual application limit for the EPA Regional Office from which funding is being requested. The total amount of requested funding needs to be commensurate with the applicant's proposed activities.

• **Project Location** - Primary project location (County, State, City, and Zip Code) listed in Section 2 of the workplan should be included here. In addition, briefly describe the area(s) where the affected vehicles or engines operate in a few sentences or less.

Sectors	Target Fleets	Target Fleets (continued)
Agriculture	Aerial Lift	Off-Highway Tractor
Airport	Agricultural Mower	Off-Highway Truck
Construction	Agricultural Tractor	Other Agricultural Equipment
Freight (non-port goods	Airport Support Equipment	Other Construction Equipment
movement)		
Industrial (non-port	Backhoe Loader	Other General Industrial
material handling,		Equipment
other)		
Mining	Baler/Combine/Swather	Other Material Handling

		Equipment
Municipal (emergency, utility)	Bore/Drill Rig	Passenger Locomotive
Port	Cement & Mortar Mixer	Paving/Surfacing Equipment
Railyard	Concrete/Industrial Saw	Plate Compactor
School Bus	Container Handling Equipment	Railcar Mover
Stationary	Crane	Refuse Hauler
Transit (non-port)	Crawler Dozer/Loader	Rough Terrain Forklift
	Crushing/Proc. Equipment	Rubber Tire Dozer/Loader
	Dumpsters/Tender	School Bus
	Excavator	Short Haul – Combination
	Forklift	Short Haul – Single Unit
	Gantry Crane	Signal Board
	Line Haul Locomotive	Skid Steer Loader
	Line Haul Locomotive as Switch	Stationary Air Compressor
	Logging Equip Fell/Bunch/Skidder	Stationary Gas Compressor
	Long Haul – Combination	Stationary Generator
	Long Haul – Single Unit	Stationary Irrigation Set
	Marine – Auxiliary	Stationary Pump
	Marine – Propulsion	Stationary Welder
	Mining Equipment	Sweeper/Scrubber
	Mobile Air Compressor	Switch Locomotive
	Mobile Gas Compressor	Tamper/Rammer
	Mobile Generator	Terminal Tractor
	Mobile Irrigation Set	Transit Bus
	Mobile Pump	Transport Refrigeration Unit
	Mobile Welder	Trencher

#### (2) Workplan:

Applicants must ensure that the workplan addresses the evaluation criteria in Section V.A. of the NOFO. Applicants should use the section and subsection numbers and headings below which correspond with the evaluation criteria in Section V.A. of the NOFO.

#### **Section 1- Overall Project and Approach**

#### a. Overall Project

Provide a project summary. This section should include details about how the activities will meet the goals and objectives of the program (Section I. of the NOFO) and demonstrate that all activities meet the program eligibility criteria (Sections II. and III. of the NOFO.) Applicants should include:

- A discussion of how the project meets the program goals and objectives.
- A summary of the vehicles, engines and/or equipment targeted for emissions reductions and their eligibility under Section III of the NOFO, including but not limited to ownership, usage, and remaining life requirements.

- A discussion of how the applicant has considered the available/eligible technology options for the target fleet and has arrived at the chosen diesel emissions reduction solution(s).
- A summary of all verified and/or certified technologies to be funded by the applicant.
- Applications which include engine replacements and vehicle/equipment replacements should include the applicant's plans for engine/vehicle/equipment scrappage.
- Applicants proposing nonroad, locomotive, or marine replacements should commit to using Tier 4 vehicles, equipment, or engines if Tier 4 vehicles, equipment, or engines with the appropriate physical and performance characteristics are available, as described in Section III.D.2.b. Applicants anticipating the use of lower tiered vehicles, equipment, or engines should discuss their rationale for proposing lower tiered replacements and will be required to submit a Best Achievable Technology analysis if selected for funding.
- Applications which include locomotives and/or marine engines and/or stationary engines should include a clear and concise justification for why/how the proposed emissions reductions are not subject to the restriction for mandated measures under this NOFO, as described in Section III.D.2.m and Appendix C.

Applications should only include information in Section 1.a. that will not be detailed by another section of the workplan.

#### b. Project Approach

Provide a detailed description of the proposed activities to be undertaken. Include details of every activity for which the applicant is seeking funding. Applicants should include:

- A discussion of the roles and responsibilities of the Applicant organization and any other project partners, including subrecipients, beneficiaries, and/or contractors. Applicants should discuss whether they will directly implement the project or fund project partners through subawards or participant support costs as described in Appendix A.
- Applicants should discuss who or what entities or organization(s) will retain ownership of any vehicles, engines and/or equipment purchased with funding from this project.

#### **Section 2 - Goods Movement Facilities**

This section of the workplan should include a detailed discussion of the project location in terms of vocational use of the vehicles/engines/equipment targeted for diesel emissions reductions, as described in Section I.B.1.a. Specifically, applicants should demonstrate if the target fleets are located at, or service, goods movement facilities as defined below. Applicants should include the name of the specific port, airport, rail yard, terminal, or distribution center where the affected vehicles operate, as applicable. Points will be based upon the percentage of time targeted vehicles operate in, and/or the percentage of total targeted vehicles that operate in, goods movement facilities.

- Ports places alongside navigable water with facilities for the loading and unloading of passengers and/or cargo from ships, ferries, and other vessels
- Airports places where aircraft operate that have paved runways and terminals which include cargo, baggage and/or passenger-movement operations
- Rail Yards a system of tracks other than main tracks and sidings used for making up trains, for storing cars, and for other purposes

- Terminals 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
- Distribution Centers facilities that perform consolidation, warehousing, packaging, decomposition, and other functions linked with handling freight, often in proximity to major transport routes or terminals, and which generate large amounts of truck traffic

#### Section 3 - Environmental Justice and Disadvantaged Communities

This section of the workplan should include a detailed discussion of the geographic project location and how the proposed project will benefit the affected disadvantaged communities. Applicants should describe the local environmental/public health impacts that the project seeks to address and describe how affected communities will benefit from the desired project results. Specifically, applicants should demonstrate if the target fleets are located in or operate in disadvantaged communities as defined below. Applicants should include the name of the counties where the affected vehicles operate. Points will be based upon the percentage of time targeted vehicles operate in, and/or the percentage of total targeted vehicles that operate in, disadvantaged communities. Please see Section I.B.1.b. of this NOFO for more information on environmental justice and disadvantaged communities.

This section of the workplan should include the following information. The use of the template below is optional, and EPA will not penalize or withhold a benefit from the applicant for providing the information in another format. The term "project location" as used in this NOFO refers to the area(s) where the affected vehicles or engines operate. If a single application includes vehicles operating in more than one area, this section of the work plan should indicate where the vehicles operate and the amount (%) of time the vehicles typically operate in each area.

#### PROJECT LOCATION TABLE

	County	State	City	Zip code	Fleet, Types and Number of Affected Vehicles	% Of Time Vehicles Spend in Area	Non- Attainment Area	Air Toxic Assessment Area	Goods Movement
1									
2									
3									
4									
5									

#### Instructions for table:

• In entry #1, you must enter a county, state, city and ZIP code to indicate the "primary" place of performance (POP). Primary place of performance can indicate the location where the majority of the affected vehicles operate, or where the affected vehicles operate a majority of

- the time. In other words, if you had to pick a single location to represent the project, where would it be? For port projects, primary place of performance will likely be the port's address.
- If applicable, enter additional places of performance in lines #2, #3, etc., following the instructions below. Broader project locations may be represented by entering "statewide" into the county column, or "countywide" into the city column. Additional rows may be added to the table as needed.
- County: Enter the county name, if applicable, or "statewide."
- State: Enter the state name.
- City: Enter city name, if applicable, or "countywide."
- ZIP Code: Enter ZIP code, if applicable.
- Fleet, Type and Number of Affected Vehicles: Enter the name of the fleet (if applicable) and the type and number of affected vehicles that operate within the listed project location.
- % of Time Vehicles Spend in Area: Enter the estimated percentage of time the affected vehicles operated within the listed project location.
- Nonattainment Area: Indicate with an "X" whether the listed project location is Nonattainment or Maintenance Area as described in Section I.B.3.b.1.a. of the NOFO.
- Area of Air Toxics Concern: Indicate with an "X" whether the listed project location is an area of air toxics concern as described in Section I.B.3.b.1.b. of the NOFO.
- Goods Movement: Indicate whether the affected vehicles operate at goods movement facilities within the listed project location by entering the name of the specific port, airport, rail yard, terminal, or distribution center, as described in Section I.B.3.a. of the NOFO.

#### Section 4 – Project Sustainability

The applicant should include details which demonstrate the ability of the applicant and project partners to promote and continue efforts to reduce emissions after EPA funding for this project has ended. Specifically, applications will be evaluated on whether the applicant and/or its project partners:

- **a.** have existing policies or new commitments to, by the end of the project period, adopt idle-reduction policies, adopt contract specifications requiring the use of cleaner, more efficient vehicles and equipment, complete an up-to-date mobile source equipment inventory, or adopt other strategies to promote and continue efforts to reduce diesel emissions.
- **b.** have a publicly available baseline mobile source emissions inventory for PM2.5 and/or NOx that was completed after 2019 or commit to completing one before the end of the project period.
- c. have a publicly available plan finalized after 2019 to reduce mobile source emissions that includes specific PM2.5 and/or NOx emission targets or commit to completing one before the end of the project period.
- d. have established or commit to establishing before the end of the project period, a clear point of contact in a public platform (e.g., newsletter, website) for community issues and complaints (specific to air quality or broader) and a publicly documented policy or process to engage communities and get their input on operations and projects that impact air quality.

The process could be recent (within a year) or upcoming (before the end of the project period) meetings and/or a policy or process to otherwise get input (e.g., a standing, citizens advisory committee.)

#### Section 5 - Project Resilience to Climate Impacts

Applicants should provide details which demonstrate the ability to protect grant funded investments from severe weather events. As described in Section I.B.1.c, EPA will evaluate applications based on the quality and extent to which the project assesses and implements adaptation considerations described below to help ensure that the project achieves its expected outcomes even as the climate changes.

Adapting to climate change involves actions by individuals, businesses, governments, and others to build resilience and reduce vulnerability of human and natural systems to unavoidable climate impacts. Adaptation also reduces the long-term costs of responding to these impacts. Projects can demonstrate consideration of climate change adaptation through measures taken to anticipate, prepare for, and avoid adverse impacts of climate change. For example, assessing project vulnerability to climate impacts can be incorporated into project planning, such as siting decisions and operational plans. Measures taken to avoid damages could include ensuring fleets and equipment are protected from impacts such as flooding and sea level rise and protecting infrastructure from storm damage. EPA will evaluate applications based on the quality and extent to which the project assesses and implements adaptation considerations described above to help ensure that the project achieves its expected outcomes even as the climate changes.

#### <u>Section 6 – Workforce Development</u>

Evaluation criteria points will be given to applications that demonstrate plans and activities to prepare their workforce for the project, such as conducting robust workforce planning to ensure current drivers, mechanics, electricians, and other essential personnel receive training to safely operate and maintain the new vehicles, engines, infrastructure, and equipment, in order to maximize the useful life of any certified engine configuration, verified technology, or emerging technology used or funded by the eligible entity. Additionally, evaluation criteria points will be given to applications which demonstrate policies and protections that currently exist or will be put in place to prevent existing workers from being replaced or displaced because of new technologies purchased with funding awarded under this NOFO. Evaluation criteria points will be given to applicants who demonstrate that they engage with workers and their representatives directly in the development of workforce planning activities to incorporate worker voice into the project. Please see Section I.B. of this NOFO for more information on workforce development.

Priority for funding is given to applicants who demonstrate that they engage with workers and their representatives directly in the development of workforce planning activities to incorporate worker voice into the project.

EPA will evaluate this criterion based on the quality and extent of the workforce planning activities. Applicants can demonstrate workforce planning by clearly articulating which types of jobs will be impacted by the project, how they have or will engage those workers, how they will

provide training, resources, and support to those workers for implementing the project (including the amount of time workers will spend in training and the skills they will develop), and clarifying if workers will be compensated with their regular wages for their time spent in training. Plans should make clear how they prioritize the health and safety of workers through evidence of a health and safety program that adheres to Occupational Safety and Health Administration regulations or other applicable regulations, including any modifications needed in response to the project. Where applicable, electricians working on EVSE are strongly encouraged to be certified by the Electric Vehicle Infrastructure Training Program.

#### Section 7 - Environmental Results—Outcomes, Outputs and Performance Measures

#### a. Emissions Reductions

Applicants should include the estimated annual and lifetime reductions in diesel emissions resulting from the project. Applicants should follow the instructions in Appendix B and should include a copy of their DEQ inputs and results (or alternative methods such as EPA's TRU or shore power calculators) as an attachment.

#### **b.** Cost-Effectiveness

Applicants should include the lifetime total project cost effectiveness for PM2.5 and NOx, and the lifetime capital cost effectiveness for PM2.5 and NOx. Applicants should follow the instructions in Appendix B to calculate the cost effectiveness for PM2.5 and NOx reductions.

#### c. Other Expected Project Outputs and Outcomes

Applicants should identify other expected quantitative and qualitative project outputs and outcomes, including those identified in Section I.C. of the NOFO. Specific outputs and outcomes should be provided and may include short- and longer-term activities.

In addition to a narrative discussion of the outputs and outcomes above, the applicant is encouraged to include a table such as the following:<sup>5</sup>

**Example of Outputs and Outcome Table** 

Activities	Outputs	Outcomes	
Fleet A		Annual Reduction = tons PM <sub>2.5</sub>	
	# of vehicles	Lifetime Reduction = tons PM <sub>2.5</sub>	
	replaced or technologies	Annual Reduction = tons NOx	
	installed	Lifetime Reduction = tons NOx	
		Lifetime Capital Cost Effectiveness = \$/ton	
	# of vehicles	Annual Reduction = tons PM <sub>2.5</sub>	
Elast D	replaced or	Lifetime Reduction = tons PM <sub>2.5</sub>	
Fleet B	technologies	Annual Reduction = tons NOx	
	installed	Lifetime Reduction = tons NOx	

<sup>&</sup>lt;sup>5</sup> The use of the template is optional, and EPA will not penalize or withhold a benefit from the applicant for providing the information in another format.

		Lifetime Capital Cost Effectiveness = \$/ton
	Total Annual Emissions Reduction = tons PM <sub>2.5</sub>	
		Total Lifetime Emissions Reduction = tons PM <sub>2.5</sub>
TOTALS		Total Annual Emissions Reduction = tons NOx
TOTALS		Total Lifetime Emissions Reduction = tons NOx
	Tota	Total Lifetime Capital Cost Effectiveness = \$/ton
		Total Lifetime Project Cost Effectiveness = \$/ton

#### d. Performance Measures and Plan

Applicants should describe the proposed performance measures, which will be the mechanism to track, measure, and report progress towards achieving the expected outputs and outcomes. Applicants should describe their plan for tracking and measuring progress toward achieving the expected project outputs and outcomes and how the results of the project will be evaluated, as described in Section I.C. of the NOFO.

#### e. Timeline and Milestones

The applicant should include a detailed timeline for the project including milestones for specific tasks, such as bidding, procurement, installation, and reports, along with estimated dates. Applicants should include scheduled time for grants administration, including progress reports and final report preparation, into the project timeline.

#### Section 8 - Programmatic Capability and Past Performance

#### a. Past Performance

Submit a list of up to five federally funded or non-federally funded assistance agreements that the applicant is performing or has performed within the last three years. Assistance agreements include federal grants and cooperative agreements but not federal contracts. These assistance agreements should be awards directly to the applicant. For each of the agreements, include:

- Project title
- Assistance agreement number
- Federal funding agency and assistance listing number (formally known as the CFDA number)
- Brief description of the agreement no more than two sentences

Include a discussion of whether, and if so how, the applicant was able to successfully complete and manage the listed agreements.

#### **b.** Reporting Requirements

For each of the assistance agreements listed, the applicant should describe their history of meeting the reporting requirements under the agreement(s). This should include:

- Whether the applicant submitted acceptable final reports under those agreements;
- The extent to which the applicant adequately and timely reported on its progress towards achieving the expected outputs and outcomes under those agreements; and
- If progress was not being made, whether the applicant adequately reported why not.

Note: In evaluating applicants under the past performance factors in Section V.6.A. and B. of the NOFO, EPA will consider the information provided by the applicant and may also consider relevant information from other sources, including information from EPA files and from current/prior grantors (e.g., to verify and/or supplement the information provided by the applicant). If you do not have any relevant or available past performance or past reporting information, please indicate this in the application and you will receive a neutral score for these factors, which is half of the total points available for these sub-criteria in Section V.A. of the NOFO. If the applicant does not provide any response for these items, a score of 0 for these factors may be received.

#### c. Staff Expertise

Include information on the applicant's organization, including a description of the staff's knowledge, expertise, qualifications, and resources and/or the ability to obtain them, to successfully achieve the proposed project's goals. Biographical sketches, including resumes or curriculum vitae for key staff, managers and any other key personnel can be included as an optional project team biography attachment, as listed in Section IV.A.3. of the NOFO.

#### **Section 9 - Budget**

This section of the project narrative is a detailed description of the budget found in the SF-424A and must include a discussion of the applicant's approach to ensuring proper management of grant/cooperative agreement funds, a detailed budget narrative, as well as the itemized budget table below. An applicant's budget table and budget narrative must account for both federal funds and any non-federal voluntary cost share, if applicable. Selected applicant(s) will need to submit a copy of their current indirect cost rate that has been negotiated with a federal cognizant agency prior to award. Additional guidance for developing the applicant's budget is available in RAIN-2019-G02, "Interim General Budget Development Guidance for Applicants and Recipients of EPA Financial Assistance."

Mandatory Cost Share: Applications that include projects with mandatory cost share requirements must demonstrate on the SF-424 Application for Federal Assistance, on the SF-424A Budget Information for Non-Construction Programs, and in the project narrative how the applicant will be able to meet these minimum mandatory cost share requirements if they are selected for an award. If a proposed cost share is to be provided by a named project partner, a letter of commitment must be attached to the application as described in Section III.B. and Section IV.A.3. of the NOFO.

**Voluntary Cost Sharing:** Applicants should be aware that voluntary cost sharing is not required under this NOFO and will not be evaluated. However, applicants may propose to provide voluntary 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, SF-424A, and budget detail described later in this section. If a proposed cost share is to be provided by a named project partner, a letter of commitment must be attached to the application as described in Section

III.B and Section IV.A.3 of the NOFO. The budget detail described under this section must clearly specify the amount of federal funding and the cost share amount for each category of total project costs. 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 sharing does not materialize during grant performance, EPA may reconsider the legitimacy of the award and/or take other appropriate action authorized under 2 CFR Part 200.

#### a. Budget Detail

Proposed budgets should provide a detailed breakout by funding type included in the proper budget category for each activity requesting funds. Applicants should consult <u>EPA's Interim General Budget Development Guidance for Applicants and Recipients of EPA Financial Assistance.</u>

Applicants should provide a detailed breakout by funding type included in the proper budget category for each activity requesting funds. Applicants should use the instructions, budget object class descriptions, and example table below to complete the detailed budget section of the project narrative. The budget detail and the budget table should be included in the project narrative and count towards the maximum 14-page limit. Applicants should include applicable rows of costs for each budget category in their budget table to accurately reflect the proposed project budget. Applicants must itemize costs related to personnel, fringe benefits, travel, equipment, installation or labor supplies, contractual costs, other direct costs (i.e., subawards, participant support costs), indirect costs, and total costs. If providing a mandatory and/or voluntary cost share, the budget detail must clearly specify the amount of federal funding and the cost share amount for each category. For applicants proposing to implement a participant support cost or rebate program, the rebates are appropriately listed under the Other budget category as "Participant Support Costs." See Appendix A for more information on participant support costs and RAIN-2018-G05, "EPA Guidance on Participant Support Costs."

- Personnel List all staff positions by title. Give annual salary, percentage of time assigned to the project, and total cost for the budget period. This category includes only direct costs for the salaries of those individuals who will perform work directly for the project (paid employees of the applicant organization as reflected in payroll tax records). If the applicant organization is including staff time (in-kind services) as a cost-share, this should be included as Personnel costs. Personnel costs do not include: (1) costs for services of contractors (including individual consultants), which are included in the "Contractual" category; (2) costs for employees of subrecipients under subawards or non-employee program participants (e.g., interns or volunteers), which are included in the "Other" category; or (3) effort that is not directly in support of the proposed project, which may be covered by the organization's negotiated indirect cost rate. The budget detail must identify the personnel category type by Full Time Equivalent (FTE), including percentage of FTE for part-time employees, number of personnel proposed for each category, and the estimated funding amounts.
- Fringe Benefits Identify the percentage used, the basis for its computation, and the types of benefits included. Fringe benefits are allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages.

Fringe benefits may include, but are not limited to the cost of leave, employee insurance, pensions and unemployment benefit plans. If the applicant's fringe rate does not include the cost of leave, and the applicant intends to charge leave to the agreement, it must provide supplemental information describing their proposed method(s) for determining and equitably distributing these costs.

- Travel Specify the mileage, per diem, estimated number of trips in-state and out-of-state, number of travelers, and other costs for each type of travel. Travel may be: integral to the purpose of the proposed project (e.g., inspections); related to proposed project activities (e.g., attendance at meetings); or to a technical training or workshop that supports effective implementation of the project activities. Only include travel costs for employees in the travel category. Travel costs do not include: (1) costs for travel of contractors (including consultants), which are included in the "Contractual" category; (2) travel costs for employees of subrecipients under subawards and non-employee program participants (e.g., trainees), which are included in the "Other" category. Further, travel does not include bus rentals for group trips, which would be covered under the contractual category. Finally, if the applicant intends to use any funds for travel outside the United States, it must be specifically identified. All proposed foreign travel must be approved by EPA's Office of International and Tribal Affairs prior to being taken.
- Equipment Identify each item to be purchased which has an estimated acquisition cost of \$5,000 or more per unit and a useful life of more than one year. Equipment also includes accessories necessary to make the equipment operational. Equipment does not include: (1) equipment planned to be leased/rented, including lease/purchase agreement; or (2) equipment service or maintenance contracts that are not included in the purchase price for the equipment. These types of proposed costs should be included in the "Other" category. Items with a unit cost of less than \$5,000 should be categorized as supplies, pursuant to 2 CFR § 200.1, "Equipment." The budget detail must include an itemized listing of all equipment proposed under the project. If installation costs are included in the equipment costs, labor expenses shall be itemized with the detailed number of hours charged and the hourly wage. If the applicant has written procurement procedures that define a threshold for equipment costs that is lower than \$5,000, then that threshold takes precedence.
- Supplies "Supplies" means all tangible personal property other than "equipment." The budget detail should identify categories of supplies to be procured (e.g., laboratory supplies or office supplies). Non-tangible goods and services associated with supplies, such as printing service, photocopy services, and rental costs should be included in the "Other" category.
- Contractual Identify each proposed contract and specify its purpose and estimated cost. Contractual services (including consultant services) are those services to be carried out by an individual or organization, other than the applicant, in the form of a procurement relationship. EPA's Subaward Policy and supplemental Frequent Questions has detailed guidance available for differentiating between contractors and subrecipients. Leased or rented goods (equipment or supplies) should be included in the "Other" category. EPA does not require applicants to identify specific contractors. The applicant should list the proposed

contract activities along with a brief description of the anticipated scope of work or services to be provided, proposed duration, and proposed procurement method (competitive or non-competitive), if known. Any proposed non-competed/sole-source contracts in excess of \$3,500 must include a justification. Note that it is unlikely that EPA will accept proposed sole source contracts for goods and services (e.g., consulting) that are widely available in the commercial market. Refer to EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements for EPA's policies on competitive procurements and encouraging the use of small and disadvantaged business enterprises.

• Other - List each item in sufficient detail for EPA to determine the reasonableness and allowability of its cost. This category should include only those types of direct costs that do not fit in any of the other budget categories. Examples of costs that may be in this category are: insurance; rental/lease of equipment or supplies; equipment service or maintenance contracts; printing or photocopying; participant support costs such as non-employee training stipends and travel, subsidies or rebates for purchases of pollution control equipment (such as a specified amount of funding for residential woodstove changeouts or truck owners to purchase cleaner trucks); and subaward costs. Applicants should describe the items included in the "Other" category and include the estimated amount of participant support costs in a separate line item. Additional information about participant support costs is contained in RAIN-2018-G05, "EPA Guidance on Participant Support Costs."

Subawards (e.g., subgrants) and participant support costs are a distinct type of cost under this category. The term "subaward" means an award of financial assistance (money or property) by any legal agreement made by the recipient to an eligible subrecipient even if the agreement is referred to as a contract. Rebates, subsidies, and similar one-time, lump-sum payments to program beneficiaries for purchase of eligible emissions control technologies are considered participant support costs. Please refer to Appendix A for detailed guidance on funding projects and partnerships and how to correctly categorize these costs in the workplan budget. "Other" does not include procurement purchases, technical assistance in the form of services instead of money, or other assistance in the form of revenue sharing, loans, loan guarantees, interest subsidies, insurance, or direct appropriations. Subcontracts are not subawards and belong in the contractual category. Applicants must provide the aggregate amount they propose to issue as subaward work as a separate line item in the "Other" category, and a description of the types of activities to be supported. Refer to EPA's Subaward Policy and supplemental Frequent Questions for additional guidance.

- Indirect Charges If indirect charges are budgeted, indicate the approved rate and base. Indirect costs are those incurred by the grantee for a common or joint purpose that benefit more than one cost objective or project and are not readily assignable to specific cost objectives or projects as a direct cost. Examples of Indirect Cost Rate calculations are shown below:
  - Personnel (Indirect Rate x Personnel = Indirect Costs)
  - o Personnel and Fringe (Indirect Rate x Personnel & Fringe = Indirect Costs)
  - Total Direct Costs (Indirect Rate x Total direct costs = Indirect Costs)
  - O Direct Costs, less distorting or other factors such as contracts and equipment (Indirect Rate x (total direct cost distorting factors) = Indirect Costs)

Additional indirect cost guidance is available in <u>RAIN-2018-G02</u>, "<u>Indirect Cost Guidance for Recipients of EPA Assistance Agreements."</u>

#### Example Budget Table (Required, part of the 14-page limit)<sup>6</sup>

		Voluntary	Mandatory
Line Item and Itemized Cost	EPA Funding <sup>7</sup>	Cost Share <sup>7</sup>	Cost Share <sup>8</sup>
(1) Project Manager @ \$40/hr x 10 hrs/wk x 52 wks		\$20,800	
(1) Project Staff @ \$30/hr x 40 hrs/wk x 40 wks	\$48,000		
TOTAL PERSONNEL	\$48,000	20,800	
20% of Salary and Wages	20% (48,000)	20% (20,800)	
- Retirement, Health Benefits, FICA, SUI	\$9,600	\$4,160	
TOTAL FRINGE BENEFITS	\$9,600	\$4,160	
Mileage for PM: 100 mi/mo @ \$.17/mi x 12 mo	\$204		
Mileage for Staff: 200 mi/mo @ \$.17/mi x 12 mo	\$408		
TOTAL TRAVEL	\$612		
25 DOCs + CCV@ \$5000 per unit	\$125,000		
25 DPFs with installation kit @ \$6,000 per unit	\$150,000		
10 New Vehicles @ \$100,000 per unit (25% / 75%)	\$250,000		\$750,000
5 Electric School Bus @ \$200,000 per unit (45% / 65%)	\$450,000		\$650,000
TOTAL EQUIPMENT	\$ 975,000		\$1,400,000
100 Replacement CCV filters @ \$10 per unit	\$1,000		
TOTAL SUPPLIES	\$1,000		
Retrofit Installation Contract	\$10,000		
TOTAL CONTRACTUAL	\$14,000		\$6,000
Subgrant to School District for 10 Bus @ \$100,000 per unit	\$250,000		\$750,000
(25% / 75% cost share on buses) plus \$32,000 in personnel/admin costs	\$32,000		
Participant Support Costs for 10 Rebates for School Bus Replacement (\$100,000 per bus @ 25% / 75% cost share or buses)	\$250,000		\$750,000
TOTAL OTHER	\$532,000		\$750,000
Federal Negotiated Indirect Cost Rate = 10% (Indirect Rate x Personnel = Indirect Costs)	\$4,800	\$2,080	
TOTAL INDIRECT	\$4,800	\$2,080	

<sup>&</sup>lt;sup>6</sup> The use of the template is optional, and EPA will not penalize or withhold a benefit from the applicant for providing the information in another format.

<sup>&</sup>lt;sup>7</sup> EPA Funding amount must be included on the SF-424 in Section 18.a and SF-424A in: cell 5(e) under Section A – Budget Summary; and Column (1) under Section B – Budget Categories.

Non-Federal Cost Share funding amount must be included on the SF-424 in Section 18.b-e and SF424A in: cell 5(f) under Section A – Budget Summary; columns (2) and (3) under Section B – Budget Categories; and Section C – Non-Federal Resources.

TOTAL FUNDING	\$1,585,012	\$27,040	\$2,156,000
		Voluntary Cost Share	Mandatory Cost Share
TOTAL PROJECT COST	\$3,768,052		

Note on Management Fees: When formulating budgets for applications, applicants must not include management fees or similar charges in excess of the direct costs and indirect costs at the rate approved by the applicant's cognizant federal audit agency, or at the rate provided for by the terms of the agreement negotiated with EPA. The term "management fees or similar charges" refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs that are not allowable under EPA assistance agreements. Management fees or similar charges cannot be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the work plan.

#### b. Expenditure of Awarded Funds

Applicants should provide a detailed written description of the applicant's approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner.

#### c. Reasonableness of Costs

EPA will evaluate the reasonableness of the applicant's budget based on the applicant's narrative description of the budget and detailed breakout of requested funding for each work component or task. Provide a detailed description of every itemized cost, including how every cost relates to the project narrative and specific emission reduction activities. Instructions for what to include in the Budget Detail are described in Section 8.a. above.

Applicants must itemize the cost categories as listed below and the SF-424A form: personnel, fringe benefits, contractual costs, travel, equipment, supplies, contractional costs, other direct costs (subawards, participant support costs), indirect costs, and total costs. Round up to the nearest dollar and do not use any cents.

For applicants that provide a mandatory and/or voluntary cost share as described in Section III.B. of the NOFO, the budget narrative must include a detailed description of how the applicant will obtain the cost share and how the cost share funding will be used. Proposed mandatory and/or voluntary cost share included in the budget detail must also be included on the SF-424 and SF-424A.

Recipients may issue subawards, contracts, or participant support costs to implement projects. Please refer to Appendix A for detailed guidance on these funding options and how to correctly categorize these costs in the workplan budget.

#### Section 10 - Attachments (As listed in Section IV.A of the NOFO):

• Applicant Fleet Description (Required, does NOT count towards the 14-page limit): Applicants must use the Other Attachment form in Grants.gov to upload an .xls file of their applicant fleet description. The purpose of the applicant fleet description is to describe in

detail the specific vehicles and engines targeted for emissions reductions as well as the diesel emissions reduction solution(s) to be implemented under the proposed project. Information provided in the applicant fleet description will be used to help determine project eligibility based the criteria in Section III., and for evaluation purposes as described below. **Applicants are encouraged to use the sample format for the applicant fleet description** found on the DERA National Grants website.<sup>9</sup>

• Applicants must describe, to the extent possible, the fleet(s) targeted for the proposed project, including: fleet owner; publicly or privately owned; place of performance; sector; target fleet type; on highway weight class; on highway description (delivery, drayage, emergency, shuttle bus, or utility vehicle); quantity; vehicle identification number(s); vehicle make; vehicle model; vehicle model year; engine serial number(s); engine make; engine model; engine model year; engine tier; engine horsepower; cylinder displacement; number of cylinders; engine family name; engine fuel type; annual amount of fuel used; annual usage hours; annual miles traveled; annual idling hours; annual hoteling hours; and remaining life. Applicants must describe, to the extent possible, the diesel emissions reduction solution(s) applied to each targeted vehicle/engine, including: year of upgrade action; upgrade; upgrade cost per unit; upgrade labor cost per unit; new engine model year; new engine tier; new engine horsepower; new engine duty cycle; new engine cylinder displacement; new engine number of cylinders; new engine family name; annual idling hours reduced; annual hoteling hours reduced; and annual diesel gallons reduced. This information should be presented in a table format.

Applicants will be scored under Section V.A, Criterion 10, Applicant Fleet Description, on the degree to which detailed information is provided within the applicant fleet description. The information provided within the applicant fleet description should be used to estimate the anticipated emissions reductions from the project and should be consistent with the information presented in the project narrative (see Appendix B for additional information on calculating emissions reductions).

- Emissions Reduction Calculations (Required, does NOT count towards the 14-page limit): Applicants must use the Other Attachment form in Grants.gov to upload calculations. Applicants should follow the instructions in Appendix B of this announcement for calculating emissions reductions. Applicants must include a copy of their Diesel Emissions Quantifier (DEQ) results spreadsheet showing DEQ results and inputs as an attachment to their application. If alternative methods are used, such as the EPA TRU calculator or EPA Shore Power calculator, applicants must thoroughly describe and document their emissions reduction calculation methods in an attachment to the project narrative.
- Partnership Letters (If applicable, does NOT count towards the 14-page limit): Applicants must use the Other Attachment form in Grants.gov to upload letters. If the proposed cost share is to be provided by a named project partner, a letter of commitment is required. If applicable, additional letters that demonstrate strong, long-term involvement throughout the project from a variety of project partners are encouraged. Letters should specifically

<sup>&</sup>lt;sup>9</sup> The use of the template is optional, and EPA will not penalize or withhold a benefit from the applicant for providing the information in another format.

indicate how project partners and supporting organizations will participate in or directly assist in the design and performance of the project, or how obtaining support from project partners will allow the applicant to more effectively perform the project. Letters should be addressed to the applicant organization and included as attachments to the application. Please do not ask partners to submit letters directly to EPA.

• Mandated Measures Justification Supporting Information (If applicable, does NOT count towards the 14-page limit): Applicants must use the Other Attachment form in Grants.gov to upload calculations. If applicable, the application must include a clear and concise justification in Section 1 of the project narrative, for why/how the emissions reductions proposed for funding are not subject to the Restriction for Mandated Measures under this NOFO. Applicants must provide sufficient detail and information to support the justification, including maintenance schedules and history, if applicable. Please see Section III.D.2.m. and Appendix C for more information.

#### D. Releasing Copies of Applications

In concert with EPA's commitment to conducting business in an open and transparent manner, copies of applications submitted under this NOFO may be made publicly available for a period of time after the selected applications are announced. EPA recommends that applications not include trade secrets or commercial or financial information that is confidential or privileged, or sensitive information, if disclosed, that would invade another individual's personal privacy (e.g., an individual's salary, personal email addresses, etc.). However, if such information is included, it will be treated in accordance with 40 CFR § 2.203. (Review EPA clause IV.a., Confidential Business Information, under EPA Solicitation Clauses.)

Clearly indicate which portion(s) of the application you are claiming as confidential, privileged, or sensitive information, or state 'n/a' or 'not applicable' if the application does not have confidential, privileged, or sensitive information. As provided at 40 CFR § 2.203(b) if no claim of confidential treatment accompanies the information when it is received by EPA, it may be made available to the public by EPA without further notice to the submitter.

#### V. APPLICATION REVIEW INFORMATION

Note: Additional provisions that apply to this section can be found at EPA Solicitation Clauses.

Only eligible entities whose application(s) meet the threshold criteria in Section III.C. of this NOFO will be evaluated according to the criteria set forth below. **Applicants should explicitly address these criteria as part of their application package submittal in the project narrative, following the content requirements set forth in Part IV.** Each application will be rated using a point system. Applications will be evaluated based on a total of 145 points possible.

### A. Evaluation Criteria

Criteria	Points
<b>Total Possible Points</b>	145
<ol> <li>Project Summary and Approach: Under this criterion, EPA will evaluate applications based on the extent and quality of the applicant's project summary and overall approach. Specifically, EPA will evaluate:         <ul> <li>A. (10 points) The extent and quality to which the project meets the goals and objectives of the program (Section I. of the NOFO) and demonstrates that all activities meet the program eligibility criteria (Sections II. and III. of the NOFO.); and</li> <li>B. (10 points) The extent and quality of the applicant's overall approach and</li> </ul> </li> </ol>	20
implementation plan, including activities, tasks, roles and responsibilities, and partnerships.	
2. Goods Movement: Under this criterion, EPA will evaluate applications based on the extent to which projects target vehicles located at, or that service, goods movement facilities such as ports, airports, rail yards, terminals, or distribution centers, as described in Section I.B.1.a  Partial points may be awarded for this criterion depending on how much of the project occurs in the priority areas.	5
<ul> <li>3. Environmental Justice and Disadvantaged Communities: Under this criterion, EPA will evaluate applications based on:</li> <li>A. (10 points) The extent to which projects are located in an Ozone or PM<sub>2.5</sub> nonattainment or maintenance area, as described in Section I.B.1.b.</li> <li>B. (10 points) The extent to which projects are located in an area where all or part of the population in the area is exposed to diesel PM concentrations above the 80th percentile for diesel PM, as described in Section I.B.1.b.</li> <li>C. (5 points) The extent to which the project addresses engagement with affected communities and/or populations, especially local residents, to ensure their meaningful participation with respect to the design, planning, and performance of the project.</li> <li>Partial points may be awarded for this criterion depending on how much of the project occurs in the priority areas.</li> </ul>	25

Criteria	Points
<ul> <li>4. Project Sustainability: Under this criterion, EPA will evaluate applications based on the extent and quality to which the applicant and/or its project partners will promote and continue efforts to reduce emissions after EPA funding for this project has ended.</li> <li>A. (5 points) The application demonstrates that the applicant and/or project partner(s) have existing idle-reduction policies, contract specifications requiring the use of cleaner, more efficient vehicles and equipment, up to date mobile source equipment inventories, or other policies in place to promote and continue efforts to reduce diesel emissions. If not, the application specifies a commitment to complete one or more before the end of the project period.</li> <li>B. (5 points) The application demonstrates that the applicant and/or project partner(s) has a publicly available baseline mobile source emission inventory for PM<sub>2.5</sub> and/or NOx that was completed after 2019. If not, the application specifies a commitment to complete one before the end of the project period.</li> <li>C. (5 points) The application demonstrates that the applicant and/or project partner(s) has a publicly available plan, finalized after 2019, to reduce mobile source emissions that includes specific PM<sub>2.5</sub> and/or NOx emission targets. If not, the applicant demonstrates a commitment to developing one before the end of the project period.</li> <li>D. (5 points) The application demonstrates that the applicant and/or project partner(s) has an existing clear point of contact in a public platform (e.g., newsletter, website) for community issues and complaints (specific to air quality or broader) and a publicly documented policy or process to engage communities and get their input on operations and projects that impact air quality. The process could be a meeting in the past year and/or a policy or process to have a meeting or otherwise get input (e.g., a standing citizens advisory committee). If not, the application demonstrates a commitment to establish both before</li></ul>	20
5. Project Resilience to Climate Impacts: Under this criterion, EPA will evaluate applications based on the quality and extent to which the project assesses and implements the climate change adaptation measures to help ensure that the project achieves its expected outcomes even as the climate changes. The proposed applicant has demonstrated planning or action taken towards building project resilience and reducing vulnerabilities to climate impacts.	5
6. Workforce Development: Under this criterion, EPA will evaluate applications that demonstrate plans and activities to prepare their workforce for the project, as described in Section I.B.1.d, such as conducting robust workforce planning to ensure current drivers, mechanics, electricians, and other essential personnel receive training to safely operate and maintain the	5

Criteria	Points
new vehicles, engines, infrastructure, and equipment; as well as the extent to which the application demonstrates policies and protections that currently exist or will be put in place to prevent existing workers from being replaced or displaced because of new technologies purchased with funding awarded under this NOFO.	
7. Environmental Results – Outputs, Outcomes and Performance	
<ul> <li>Measures: Under this criterion, EPA will evaluate:</li> <li>A. (10 points) The extent to which the project will achieve significant reductions in diesel emissions. Applicants should follow the instructions in Appendix B and must include a copy of their DEQ, TRU or shore power calculator inputs and results (or alternative methods) as an attachment.</li> <li>B. (5 points) The lifetime total project cost effectiveness for PM<sub>2.5</sub> and NOx, and the lifetime capital cost effectiveness for PM<sub>2.5</sub> and NOx. Applicants should follow the instructions in Appendix B to calculate the cost effectiveness for PM<sub>2.5</sub> and NOx reductions.</li> <li>C. (5 points) The extent and quality to which the applicant identifies and quantifies other expected project outputs and outcomes, including those identified in Section I.C.</li> <li>D. (5 points) The quality of the proposed performance measures and effectiveness of the applicant's plan for tracking and measuring their progress toward achieving the expected project outputs and outcomes, including those identified in Section I.C.</li> <li>E. (5 points) The reasonableness of the proposed timeline including key milestones for specific tasks and the likelihood of completion of the project's goals and objectives by project end.</li> </ul>	30
<ul> <li>8. Programmatic Capability and Past Performance: Under this criterion, EPA will evaluate applicants based on their ability to successfully complete and manage the proposed project considering their:</li> <li>A. (5 points) Past performance in successfully completing and managing the assistance agreements identified in the project narrative as described in Section IV.C of the NOFO.</li> <li>B. (5 points) History of meeting the reporting requirements under the assistance agreements identified in the project narrative, including whether the applicant submitted acceptable final technical reports under those agreements and the extent to which the applicant adequately and timely reported on their progress towards achieving the expected outputs and outcomes under those agreements and if such progress was not being made, whether the applicant adequately reported why not.</li> </ul>	15

Criteria	Points
C. (5 points) Staff expertise and qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the	
proposed project.	
Note: In evaluating applicants under items A and B of this criterion, the Agency will consider the information provided by the applicant and may also consider relevant information from other sources including agency files and prior/current grantors (e.g., to verify and/or supplement the information supplied by the applicant). If the applicant does not have any relevant or available past performance or reporting information, please indicate this in the application and the applicant will receive a neutral score for these sub-factors (items A and B above-a neutral score is half of the total points available in a subset of possible points). If applicant does not provide any response for these	
items, you may receive a score of 0 for these sub-factors.  9. <u>Budget:</u> Under this criterion, EPA will evaluate applicants based on the	
<ul> <li>extent and quality to which:</li> <li>A. (5 points) The applicant's approach, procedures, and controls will ensure that awarded grant funds will be expended in a timely and efficient manner.</li> <li>B. (5 points) The proposed costs are reasonable to accomplish the proposed goals, objectives, and measurable environmental outcomes; and.</li> <li>C. (5 points) The proposed budget provides a detailed breakout by funding type in the proper budget category for each activity the applicant is requesting funding.</li> </ul>	15
An applicant's SF-424, SF-424A, and budget narrative must account for both federal funds and any non-federal funds (e.g., any required or voluntary cost share/match if applicable. See Section III.B.) Applicants must precisely describe in their budget narrative how they will account for any required or voluntary cost share/match, if applicable, and what role EPA funding will play in the overall project.	
10. Applicant Fleet Description: Under this criterion, EPA will evaluate applicants on the extent and quality to which detailed information on the target fleet (vessel(s), vehicle(s), engine(s) and/or equipment) is provided in the applicant fleet description, as described in Section IV.D.3.	5

#### **B.** Review and Selection Process

Applications submitted through Grants.gov will be distributed by EPA's Office of Air and Radiation to the appropriate EPA regional office for review. Applications will be reviewed by

regional review panels and assistance agreements funded under this announcement will be awarded and managed by each of EPA's ten regional offices.

Applications will first be evaluated against the threshold factors listed in Section III.C. of this NOFO. Only those applications which meet all the threshold factors will be evaluated by regional review panels using the evaluation criteria listed above. Each application will be given a numerical score and will be rank-ordered by the regional review panels.

Preliminary funding recommendations will be provided to the EPA regional selection officials based on these reviews and rankings. Under this competition, EPA anticipates funding the top 4-10 ranked proposals for each region, contingent on the quality of the proposals and funding availability.

#### C. Other Factors

Final funding decisions will be made by the appropriate EPA regional selection official based on the rankings and preliminary recommendation of the appropriate EPA regional review panel. In making the final funding decisions, the EPA regional selection official may also consider sector (fleet type) diversity, technology diversity, geographic diversity, number and size of awards, and Agency and programmatic priorities.

EPA anticipates awarding a total of approximately \$115 million under this NOFO: \$58 million in FY 2022 funding and \$57 million in 2023 funding, subject to the availability of funds, the quantity and quality of applications received, and other considerations.

Prior to selecting multiple awards for an applicant, EPA may consider whether an applicant has the staff and resources to implement all proposed projects in the applications considered for selection.

#### D. Anticipated Announcement and Federal Award Dates

EPA anticipates it will announce selection decisions in February 2024 and tentatively plans to issue all awards by the end of July 2024.

#### 1. Submission Date and Times

The application submission deadline date and time for submission of applications is **Friday**, **December 1, 2023, at 11:59 p.m. Eastern Time (ET)**. Applications submitted after the closing date and time will not be considered for funding.

#### 2. Information Sessions

EPA will host three information sessions regarding this NOFO via teleconference/webinar, based on the schedule listed on the <u>DERA National Grants website</u>. EPA encourages potential applicants to take advantage of these information sessions to learn more about the DERA program and the grant application process. Participants will have the opportunity to

have their questions answered by EPA in a public forum. EPA will attempt to answer any appropriate questions in these public forums. Pre-registration is not required. Webinar links and dial-in information for the information sessions can be found on the <u>DERA National Grants</u> website.

Questions and answers from these information sessions will also be posted in the questions and answers document located at <a href="https://www.epa.gov/dera/national">https://www.epa.gov/dera/national</a> webpage.

#### VI. AWARD ADMINISTRATION INFORMATION

Note: Additional provisions that apply to this section can be found at EPA Solicitation Clauses.

#### A. Award Notices

EPA anticipates notification to successful applicants will be made via electronic mail within 60 days after the closing date of this NOFO. The notification will be sent to the original signer of the application, or the project contact listed in the application. This notification, which informs the applicant that their application has been selected and is being recommended for award is not an authorization to begin work. The official notification of an award will be made by the applicable Regional Grants Management Office.

Applicants are cautioned that only a grants officer is authorized to bind the government to the expenditure of funds; selection does not guarantee an award will be made. For example, statutory authorization, funding, or other issues discovered during the award process may affect the ability of EPA to make an award to the applicant. The award notice, signed by the EPA grants officer, is the authorizing document and will be provided through electronic mail. The successful applicant may need to prepare and submit additional documents and forms (e.g., work plan), which must be approved by EPA, before the grant can officially be awarded. The time between notification of selection and award of a grant can take up to 90 days or longer.

#### B. Combining Successful Applications into One Award

If an applicant submits multiple applications under this competition, and multiple applications within a single region are selected for funding, EPA may award a single assistance agreement that combines separate applications for different tasks/activities.

If an applicant submits multiple applications under this competition, and multiple applications are selected for funding, EPA may award a single assistance agreement that combines separate applications for different tasks/activities.

#### C. Administrative and National Policy Requirements

Please review a listing and description of general <u>EPA Regulations</u> applicable to the award of assistance agreements.

#### D. Reporting Requirement

Programmatic progress reports and a detailed final report will be required. Programmatic Progress reports summarizing progress made on achieving the outputs and outcomes detailed in the project workplan (including any project sustainability commitments defined in Section I.C.3.d. of the NOFO), planned activities for the next reporting period and a summary of recent and cumulative expenditures are required. Progress reports should include an up-to-date fleet description and 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. Progress reports may contain signed eligibility statements, signed scrappage statements, and BAT analysis submitted to EPA for approval. Progress reports will be required either every 3 months or every 6 months as defined in the terms and conditions of the award.

The final report shall be submitted to EPA within 120 calendar days of the completion of the period of performance. The final report must include: summary of the project or activity, progress made on achieving the outputs and outcomes detailed in the project workplan (including any project sustainability commitments defined in Section I.C.3.d. of the NOFO), environmental results, advances achieved and costs of the project or activity. The final report must include a final fleet description and 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 final report must include all signed eligibility statements, signed scrappage statements, and documented EPA approval of BAT analysis. In addition, the final report shall discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational, or technical obstacles to implementing a similar project elsewhere.

Award recipients may be provided with additional information and guidance on reporting performance measures and project progress after award.

#### E. Disputes

Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005), which can be found at <u>Grant Competition Dispute Resolution Procedures</u>. Copies of these procedures may also be requested by contacting the person listed in Section VII. Note, the Federal Register notice references regulations at 40 CFR Parts 30 and 31 that have been superseded by regulations in 2 CFR parts 200 and 1500. Notwithstanding the regulatory changes, the procedures for competition-related disputes remains unchanged from the procedures described at 70 FR 3629, 3630, as indicated in 2 CFR Part 1500, Subpart E.

#### F. Equipment Use, Management, and Disposition

The following equipment use, management, and disposition instructions are applicable to recipients and subrecipients acquiring equipment under awards resulting from this NOFO. State agencies may use, manage and dispose of equipment acquired under a federal award by the state in accordance with state laws and procedures. Recipients agree that equipment acquired will be

subject to the use and management and disposition regulations at 2 CFR §200.313. Equipment is defined as tangible personal property having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of \$5,000, or the capitalization level established by the non-federal entity for financial statement purposes (see 2 CFR §200.12 Capital assets). Certified or verified technologies, vehicles, engines and nonroad equipment are considered to be equipment to the extent they fall within this definition. Recipients agree that at the end of the project period the recipient will continue to use the equipment in the project or program for which it was acquired as long as needed, whether or not the project or program continues to be supported by the Federal award. When acquiring replacement equipment, the non-Federal entity may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property. Items of equipment with a current per unit fair market value of \$5,000 or less may be retained, sold or otherwise disposed of with no further obligation to the Federal awarding agency.

#### VII. CONTACT INFORMATION

For further information, applicants should email written questions to: <a href="dera@epa.gov">dera@epa.gov</a>. EPA will respond to questions from individual applicants regarding threshold eligibility criteria, administrative issues related to the submission of the application, and requests for clarification about any of the language or provisions in the announcement through the questions and answers document. Information regarding this NOFO obtained from sources other than these Agency Contacts may not be accurate. Please type "DERA National NOFO Question" in the subject line of your email. All questions submitted via email will be answered and posted in the online FAQ document. The deadline for submitting questions via email is Friday, November 10, 2023, at 11:59 p.m. (ET). The final posting of the questions and answers document will be Monday, November 20, 2023.

All applicants are encouraged to review the questions and answers document posted at <a href="https://www.epa.gov/dera/national">https://www.epa.gov/dera/national</a> for further clarification of this NOFO. Questions and answers will be posted until the closing date of this announcement on the DERA National Grants website.

# APPENDIX A – Further information Regarding Contracts, Subawards, and Participant Support Costs

#### I. Background

The Standard Form 424A (SF-424A) includes a separate row for "contractual" costs and "other" costs. As noted in Section 9 under Section IV. A., the "other" cost category on the SF-424A should be used to cover both subawards and participant support costs. Depending on the project, these costs may be applicable to a DERA application. This appendix helps clarify these differences. Additional information about participant support costs is contained in <a href="RAIN-2018-G05">RAIN-2018-G05</a>, "EPA Guidance on Participant Support Costs."

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 and equipment in accordance with applicable competitive procurement requirements in <u>2 CFR Part 200</u>. 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.

If a recipient intends to fund the proposed project's technologies (i.e., vehicles, engines, equipment) that they do not directly own, the recipient may have the option to: (1) issue a contract; (2) make a subaward to an eligible entity; or (3) provide participant support costs to a program beneficiary. For options (2) and (3), the recipient may be able to fund technology and installation costs, but only subawards can be used to fund direct and indirect costs. If the grant recipient only intends to fund equipment and installation costs, the recipient may choose to provide participant support costs to a program beneficiary rather than a subaward. DERA recipients often use participant support costs to offer rebates or vouchers for vehicle costs.

#### II. Contracts

As described in 2 CFR § 200.331, a contract is for the purpose of obtaining goods and services for the recipient's own use and creates a procurement relationship with the contractor. Characteristics indicative of a procurement relationship between the recipient and a contractor are when the contractor:

- Provides the goods and services within normal business operations;
- Provides similar goods or services to many different purchasers;
- Normally operates in a competitive environment;
- Provides goods or services that are ancillary to the operation of the federal program; and
- Is not subject to compliance requirements of the federal program as a result of the agreement, though similar requirements may apply for other reasons.

Grant recipients that enter into procurement contracts, must comply with the applicable procurement provisions in 2 CFR § 200.317 through 200.327.

**NOTE:** If you intend to name a contractor (including an individual consultant or equipment vendor) or a subrecipient as a project partner or otherwise in your application, EPA recommends

that you carefully review, and comply with, the directions contained in the "Contracts and Subawards" clause that can be accessed under Section I.F. of this NOFO. and at <u>EPA</u> <u>Solicitation Clauses</u>. Refer to <u>EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements</u> and <u>EPA's Subaward Policy</u> and supplemental Frequent Questions for additional guidance. Applicants must demonstrate that named contractors (including individual consultants and equipment vendors) were selected in compliance with the competitive requirements of the Procurement Standards in 2 CFR Part 200 as interpreted in EPA guidance and/or that named subrecipients meet the eligibility requirements in EPA's Subaward Policy for EPA to consider their qualifications and role in the proposed project.

#### III. Subawards

Under 2 CFR § 200.1, subrecipient means a non-federal entity that receives a subaward from a grantee to carry out part of a federal program but does not include program beneficiaries receiving participant support costs; see Section IV. of this appendix below. Grant recipients may make subawards to subrecipients to carry out a portion of the grant project; in such case, the grant recipient is also known as a "pass-through entity." 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 grant. It is important to bear in mind that subrecipients are subject to the same federal requirements as the pass-through entity.

Under this competition, a non-federal entity is eligible to receive a subaward even if it is not eligible to receive a grant from EPA directly. While there may be some situations in which a subaward to an individual may be appropriate, those situations are rare.

Subrecipients only receive reimbursement for their actual direct or approved indirect costs and do not "profit" from the transaction. For-profit entities participating in grant activities are typically contractors rather than subrecipients.

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 project narrative, or on a transaction-by-transaction basis.

The applicant's project narrative 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 in the SF-424A; see Section 9 in Section IV.A. Should a recipient decide to make a subaward that was not described in the approved project narrative and budget, the recipient must obtain prior written approval from EPA's Award Official for the subaward.

If a recipient chooses to pass funds from its grant to other entities through subawards, the recipient must comply with applicable subaward 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 through 200.333, there are extensive requirements for subrecipient monitoring and management that apply to pass-through entities.

Many of the federal administrative grant regulations in 2 CFR Part 200 and 2 CFR Part 1500, as

well as the grant terms and conditions in the assistance agreement, "flow down" to subrecipients receiving a subaward. Such requirements need to be identified in the written subaward agreement between the recipient and the subrecipient. Additionally, if a subrecipient intends to procure goods or services using targeted airshed grant funds, the subrecipient must comply with the applicable federal procurement standards in 2 CFR Part 200, 2 CFR Part 1500, and 40 CFR Part 33 as these requirements also "flow down" to subrecipients.

There is no requirement for recipients to compete subawards under this NOFO; however, pass-through entities may choose to select subrecipients competitively provided this practice is consistent with applicable statutes, regulations, and the terms and conditions of their targeted airshed grant.

Recipients may use the subaward template contained in Appendix D of EPA's Subaward Policy to assist them in complying with the "subaward content" requirements; however, EPA does not mandate the use of this template.

#### IV. Participant Support Costs

Recipients may provide participant support costs (PSCs) to program beneficiaries to enable beneficiaries to participate in the recipient's program or project. PSCs include rebates, subsidies, stipends, or other payments to program beneficiaries by a grantee, subrecipient, or contractor. For example, PSCs might be used for the purchase of eligible technologies. Program beneficiaries, rather than the grant recipient, would own the new technology.

PSCs differ from subawards in that the beneficiary is participating in the grant recipient's project or program instead of implementing their own project or program. Program beneficiaries may include but are not limited to individual owner/operators, private or public fleet owners, or residents in the applicable area; however, program beneficiaries are not employees, contractors or subrecipients of the grant recipient.

Recipients may also use PSCs to make purchases on behalf of program beneficiaries. In some situations, this approach allows grant recipients to achieve economies of scale and/or take advantage of existing purchase contracts. Competitive procurement requirements apply to the grant recipient when the recipient takes this approach.

The federal administrative grant regulations in 2 CFR Part 200 and 2 CFR Part 1500, as well as the grant terms and conditions in the recipient's grant agreement, generally do not "flow down" to program beneficiaries receiving PSCs except that costs must be reasonable and incurred within the grant project period. Requirements for compliance with civil rights laws and ensuring that program beneficiaries are eligible to receive federal financial assistance are applicable as explained in *EPA Guidance on Participant Support Costs*. In addition, program beneficiaries must abide by requirements to ensure that the funds are used only for authorized purposes.

If a grantee, subrecipient, or contractor is issuing PSCs, it must have a written agreement in place. The written agreement should not be structured as a subaward agreement and should not refer to program beneficiaries as subrecipients consistent with 2 CFR § 200.1, "Subrecipient." In

addition, the written agreement should not include language requiring the program beneficiary to comply with the federal grant regulations at 2 CFR § Part 200, 2 CFR § Part 1500, or the terms and conditions found in the award between the EPA and the recipient, other than requiring that the costs must be reasonable, necessary, and allocable. The written agreement should also include the following:

- A description of the activities and amounts that will be supported by the PSCs;
- The program and/or statutory requirements that the program beneficiary must abide by in order to ensure that the funds are used only for authorized purposes;
- Specify which party will have title to the technologies (e.g., vehicles, engines, equipment and/or appliances), if any, purchased with PSCs;
- Source documentation requirements to ensure proper accounting of the PSCs; and
- Any reporting that must be submitted by the program beneficiary.

EPA's Award Official must approve PSCs on the basis of either a precise description of the PSCs in the EPA approved budget and work plan, or on a transaction-by-transaction basis. The applicant's project narrative and budget narrative should include detailed descriptions of any proposed PSCs and include cost estimates for PSCs as line items under the "Other" budget category. Should a recipient decide to issue PSCs 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 PSCs, prior written approval from EPA's Award Official is also required.

When creating budgets, applicants/recipients must exclude PSCs from Modified Total Direct Costs for calculation of indirect costs as required by 2 CFR § 200.1, "Modified Total Direct Costs."

#### **Resources:**

RAIN-2018-G05, "EPA Guidance on Participant Support Costs."

Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements

<u>Grants Policy Issuance 16-01: EPA Subaward Policy for EPA Assistance Agreement Recipients</u>, with attachments, 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

#### **APPENDIX B – Quantifying Environmental Outcomes**

#### **Diesel Emissions Reductions for Most Project Types**

To estimate the anticipated emissions reductions from your project, use the <u>Diesel Emissions</u> <u>Quantifier (DEQ)</u> tool. After running the DEQ, results may be downloaded as a spreadsheet showing DEQ results and inputs. Applicants should include a copy of their DEQ results spreadsheet showing DEQ results and inputs as an attachment to their application.

Use the same vehicle/engine data you provided for the applicant fleet description (described in Section IV.D.3) to run the DEQ. Please note you can group similar entries together to minimize the number of DEQ runs required (model year, vehicle miles traveled, idling hours, usage rate, and horsepower). It is recommended that you "Register a New Account" and log in to use the DEQ so that you will have the ability to save scenario information and retrieve it in the future.

From the DEQ results page (example shown below), enter the annual amount reduced after upgrades, and the lifetime amount reduced after upgrades for each of the listed pollutants (NOx, PM<sub>2.5</sub>, HC, CO, CO<sub>2</sub>) in Section 6.A. "Outputs and Outcomes," of your workplan.

To calculate CO<sub>2</sub> emissions reductions, you must input an amount for annual diesel gallons reduced (per engine), annual idling hours reduced (per vehicle), or annual hoteling hours reduced (per vehicle) when inputting technology information for the vehicle group.

#### **Cost Effectiveness for Most Project Types**

To estimate total cost effectiveness for the project, enter estimated total costs in the total project costs field on the create new project page in the DEQ. Total project costs reflect all costs related to this project, including EPA's share and any voluntary and mandatory cost shares. Total project costs entered into the DEQ should match the total project costs reflected in the budget detail and the SF424.

To estimate capital cost effectiveness for the project, enter the estimated upgrade cost per unit and labor cost per unit on the add an upgrade page in the DEQ. Be sure to enter costs for every upgrade/vehicle in your project or else the results will be skewed.

From the DEQ results page (example shown below), enter the lifetime capital cost effectiveness for NOx and PM<sub>2.5</sub>, and the total project cost effectiveness for NOx and PM<sub>2.5</sub> in Section 6 "Outputs and Outcomes," of your work plan.

Additional assistance is available by emailing DEQhelp@epa.gov.

# **Emission Results and Health Benefits for Project: Sample Project**

Emission Results

Health Benefits

#### **Emission Results**

Here are the combined results for all groups ar	id upgrades enter	ed for your proje	ct.			
Annual Results (short tons) <sup>2</sup>	NO <sub>x</sub>	PM2.5	HC	co	CO <sub>2</sub>	Fuel <sup>3</sup>
Baseline for Upgraded Vehicles	7.978	0.636	1.053	3.885	1,300.5	115,600
Amount Reduced After Upgrades	2.841	0.469	0.808	2.667	76.5	6,800
Percent Reduced After Upgrades	35.6%	73.7%	76.7%	68.6%	5.9%	5.9%
Lifetime Results (short tons) <sup>2</sup>						
Baseline for Upgraded Vehicles	46.414	3.660	6.085	22.447	7,650.0	680,000
Amount Reduced After Upgrades	15.795	2.660	4.637	15.223	612.0	54,400
Percent Reduced After Upgrades	34.0%	72.7%	76.2%	67.8%	8.0%	8.0%
Lifetime Cost Effectiveness (\$/short ton reduc	eed)					
Capital Cost Effectiveness⁴ (unit & labor costs only)	\$272,237	\$1,616,781	\$927,230	\$282,468	\$7,026	
Total Cost Effectiveness <sup>4</sup>	\$200,572	\$1,191,174	\$683,142	\$208,110	\$5,177	

<sup>&</sup>lt;sup>4</sup> Emissions from the electrical grid are not included in the results.

(includes all project costs)

<sup>4</sup> Cost effectiveness estimates include only the costs which you have entered.

Remaining Life	doc+ccv: School Bus   School Buses	6 years
	dpfs: School Bus   School Buses	6 years
	vehicles: School Bus   School Buses	6 years
	SB subgrant: School Bus   School Buses	6 years
	rebates: School Bus   School Buses	4 years
	electric: School Bus   School Buses	8 years

## **Downloading Spreadsheets**

Results may be downloaded as a:

• Spreadsheet showing DEQ results and your inputs (click on 'yes' if you get an error message).

<sup>&</sup>lt;sup>2</sup> 1 short ton = 2000 lbs.

 $<sup>^{\</sup>rm s}$  In gallons; fuels other than ULSD have been converted to ULSD-equivalent gallons.

#### **Alternative Methods**

If you are unable to use the DEQ, you may use <u>EPA's Motor Vehicle Emissions Simulator</u> (MOVES) for calculating emissions reductions.

Other methods may be used as appropriate. If an alternative method is used, you must thoroughly describe and document your methods in an attachment to your project narrative.

#### Diesel Emissions Reductions Above and Beyond any Restriction for Mandated Measures

No funds awarded under this NOFO shall be used to fund the costs of emissions reductions that are mandated under federal law. See Section III.D.2.m of this NOFO for more information on the restriction for mandated measures.

If the project takes place in an area covered by a mandate, or includes affected vehicles, engines or equipment, emissions reduction benefits shall only be calculated for emissions reductions implemented prior to the effective date of the applicable mandate and/or emissions reduction benefits shall only be calculated for emissions reductions that are in excess of (above and beyond) those required by the applicable mandate.

**Option 1:** To calculate emissions reduction benefits for emissions reductions implemented prior to the effective date of the applicable mandate the applicant must use the following formula to calculate lifetime emissions benefits that may be claimed.

Follow the instructions above to run the DEQ. From the DEQ results page enter the **annual amount reduced** in the spaces provided below.

NOx (tons/yr) $\overline{PM_{2.5}(tons/yr)}$ $\overline{HC}$ (tons/yr) $\overline{HC}$ (t	ons/yr) CO (tons/yr) CO2 (tons/yr) ot the lifetime results.
Retrofit Year =	Mandate Compliance Year =

Multiply the values for each pollutant by the difference of the mandate year and the retrofit year and enter the calculated lifetime emissions for each of the listed pollutants (NOx, PM<sub>2.5</sub>, HC, CO, CO<sub>2</sub>) in Section 6.A. "Outputs and Outcomes," of your work plan.

For example, if the mandate is slated to occur in 2025 and the retrofit will take place in 2021, then multiply the values above by 4 (2025 - 2021=4) to calculate lifetime emissions that may be claimed prior to the mandate.

Applicants must thoroughly describe and document their methods in an attachment to the project narrative.

**Option 2:** To calculate emissions reduction benefits for emissions reductions that are in excess of (above and beyond) those required by the applicable mandate the applicant must use the following formula to calculate lifetime emissions benefits that may be claimed.

Follow the instructions above to run the DEQ using the target engines and the technologies/emissions reductions that are required by the mandate. From the DEQ results page, enter the "mandated" lifetime amount reduced in the spaces provided below.

Then, follow the instructions above to run the DEQ using the target engines and the technologies/emissions reductions that are proposed for the project (i.e. based on the vehicle/engine data you provided for the applicant fleet description). From the DEQ results page, enter the "proposed project" lifetime amount reduced in the spaces provided below.

Subtract the mandated values for each pollutant from the proposed project values and then enter the calculated lifetime emissions for each of the listed pollutants (NOx, PM<sub>2.5</sub>, HC, CO, CO<sub>2</sub>) in Section 6.A. "Outputs and Outcomes," of your workplan.

Applicants must thoroughly describe and document their methods in an attachment to the project narrative.

#### **Diesel Emissions Reductions for Marine Shore Power Connection Systems**

In 2022, EPA updated the shower power technology assessment which describes the availability of shore power at ports throughout the U.S. and characterizes the technical and operational aspects of shore power systems at U.S. ports. The updated assessment includes information on California Air Resources Board (CARB) shore power regulations, information on vessel readiness and real-world costs and practical operational lessons from different ports. The shore power calculator tool has also been updated and in conjunction with this report, the calculator can be used to estimate how diesel emissions could be reduced through the use of shore power systems.

The calculator tool uses vessel and activity inputs, as well as the offsetting emissions of electrical power use from shore-side power to calculate emissions reductions. Applicants must use the most recently updated (2023) version of the shower power calculator in estimating emission benefits for this NOFO. Applicants must thoroughly describe, including all inputs and outputs from the calculator, and document their methods in an attachment to the project narrative.

The report, titled "Shore Power Port Assessment at US Ports 2022 Update Report," and the updated calculator tool is available online at https://www.epa.gov/ports-initiative/shore-power-technology-assessment-us-ports.

Step-by-step instructions to quantify emissions reductions using the recommended approach are included in the updated shore power calculator as well as in Appendix B of the Shore Power Port Assessment Report.

#### **Diesel Emission Reductions from Transport Refrigeration Units (TRUs)**

To better estimate potential emission reductions for projects including plug-in capabilities for TRU systems, EPA developed a spreadsheet calculator which facilitates estimating emission reductions and potential fuel savings. The TRU calculator is available on the web at: <a href="https://www.epa.gov/verified-diesel-tech/refrigerated-trailers-and-transport-refrigeration-units-trus">https://www.epa.gov/verified-diesel-tech/refrigerated-trailers-and-transport-refrigeration-units-trus</a>. When estimating emission benefits for TRU projects, applicants must use the latest version of the calculator, thoroughly describe, including all of the inputs and outputs from the calculator, and document their methods in an attachment to the project narrative.

TRUs are integral to transporting freight that requires climate-controlled conditions. Most refrigerated trailers and trucks are equipped with diesel engine powered TRUs. In each case, the diesel engines are considered "nonroad" engines and therefore may have higher emission rates than modern truck engines. Because TRUs are typically operating when trucks and trailers are being loaded or when waiting at distribution centers, there can be large concentrations of these nonroad engines operating at one location.

Some newer TRU systems are equipped with plug-in capabilities so the diesel engine can be off when parked at a distribution center or other facility. Additionally, some TRUs are designed to have plug-in capabilities but they need additional components such as electrical cords and connectors. Additional information on TRU systems and eligible DERA funding is available on the DERA TRU Factsheet at <a href="https://www.epa.gov/system/files/documents/2023-02/420f22029.pdf">https://www.epa.gov/system/files/documents/2023-02/420f22029.pdf</a>.

#### **APPENDIX C – Mandated Measures Justification**

No funds awarded may be used to fund emission reductions mandated by federal statute. 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 (SIP) approved by the EPA 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 SIP.

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).

All applications which include locomotives and/or marine engines and/or stationary engines must include a clear and concise justification in Section 1 of the project narrative, for why/how the proposed emissions reduction are not subject to the restriction for mandated measures under this NOFO. The justification must clearly demonstrate why/how:

- the engines are exempt from the requirements of EPA's rule; or
- emissions reductions funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule; and/or
- emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the rule but are in excess of (above and beyond) those required by the applicable mandate.

Applicants must provide sufficient information to support the justification, including copies of maintenance records, if applicable. Supporting information should be included as an attachment to the application and does not count towards the 14-page limit.

Applicants are responsible for addressing all applicable parts of the rule in their justification for why/how the emissions reductions proposed for funding are not subject to the restriction for mandated measures under this NOFO.

#### <u>Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition</u> <u>Engines Less than 30 liters per Cylinder</u>

What is sufficient justification?

For locomotives, the justification must include, but is not limited to:

- The original build date of each locomotive.
- The model year of the existing engines for each locomotive.

- Whether the existing locomotive engines are the original engines that were installed in the locomotive by the locomotive manufacturer at the time of original manufacturer, or whether the original engines were ever replaced or upgraded (prior to the activities that are being proposed for funding). If so, when and what upgrades were made?
- The date that the power assemblies of each existing engine have been replaced, if ever.

As outlined above, certain locomotives and marine engines are exempt from the rule. This exemption may be based on the age and/or size of the locomotive or marine engines, or on the type or size and/or annual revenue of the owner/operator. In these cases, sufficient justification would include a summary of the rule applicability and an explanation of why each locomotive or marine engine is exempt from the rule. For example:

"EPA's Marine Remanufacture Program applies only to those commercial marine propulsion and auxiliary diesel engines which meet all of the following criteria:

- C1 and C2 engines (i.e. per cylinder displacement up to 30 liters);
- *Greater than 600 kW (800 hp);*
- Tier 2 and earlier engines; and
- Built in model year 1973 or later.

Engines A, B, and C, as described fully in the previously submitted Applicant Fleet Description, are exempt from the requirements of EPA's marine rule because all three engines are of original model year 1972. Further, all three of these engines are 600 horsepower engines and are therefore exempt from the rule requirements.

As outlined above, certain locomotives and marine engines may be subject to the rule requirements, but the applicant may be able to demonstrate that the emissions reduction funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule and/or emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the rule, but are in excess of (above and beyond) those required by the applicable mandate. In these cases, sufficient justification would include a summary of the rule applicability and an explanation of how the proposed emissions reductions from each locomotive or marine engine meet the criteria listed above. For example:

"Marine Engine D is a commercial C1 marine diesel engine of 900 hp, built in model year 1980, and is unregulated (please see previously submitted Applicant Fleet Description for full engine information including marine engine model and engine family name), therefore this engine is covered by EPA's Marine Remanufacture Program. We have conducted a thorough search of EPA's list of remanufacture systems (i.e. "kits", certified for use with Category 1 and 2 marine diesel engines according to the provisions of 40 CFR Part 1042, Subpart I) listed at EPA's Annual Certification Data for Vehicles, Engines, and Equipment, and have determined that at this time there are no certified kits available for this engine. Therefore, there are no applicable requirements under the rule for this engine at this time and the emissions reductions proposed for EPA funding are not subject to the Restriction for Mandated Measures under this NOFO.

OR

"Marine Engine E is a commercial C1 marine diesel engine of 900 hp, built in model year 1980, and is unregulated (please see previously submitted Applicant Fleet Description for full engine information, including marine engine model and engine family name), therefore this engine is covered by EPA's Marine Remanufacture Program. We have conducted a thorough search of EPA's list of remanufacture systems (i.e. "kits", certified for use with Category 1 and 2 marine diesel engines according to the provisions of 40 CFR Part 1042, Subpart I) listed at EPA's Annual Certification Data for Vehicles, Engines, and Equipment, and have determined that at this time there is one certified remanufacture kit available for this engine: [insert kit info].

However, emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the rule but are in excess of (above and beyond) those required by the applicable mandate. [The applicant should include a thorough discussion of the emissions reductions that could be achieved by the application of the certified kit to the existing engine and the emissions reductions that will be achieved by the activities proposed from funding under the grant. The applicant should calculate the difference between the required emissions reductions and the proposed emissions reductions and should be able to clearly demonstrate that emissions reductions funded with EPA funds are in excess of (above and beyond) those required by the rule.]

Therefore, the emission reductions proposed for EPA funding are not subject to the restriction for mandated measures under this NOFO.

#### Additional Resources:

- Final Rule: <u>Control of Emissions of Air Pollution From Locomotive Engines and Marine</u> Compression-Ignition Engines Less Than 30 Liters per Cylinder
- Fact Sheet: EPA Finalizes More Stringent Emissions Standards for Locomotive Engines and Marine Compression-Ignition Engines
- Fact Sheet: Control of Emissions from Idling Locomotives EPA420-F-08-014, may be found at the National Service Center for Environmental Publications
- EPA: Locomotives: Exhaust Emission Standards
- Frequently Asked Questions from Marine Engine Owners and Rebuilders about EPA's Marine Remanufacture Program EPA420-F-09-003, may be found at the <u>National</u> <u>Service Center for Environmental Publications</u>
- EPA: Federal Marine Compression-Ignition Engine Exhaust Emission Standards
- Marine and Locomotive Certified Remanufacture Systems can be found at <u>EPA's Annual Certification Data for Vehicles</u>, <u>Engines</u>, and <u>Equipment</u>.

The information that follows is provided purely for informational purposes to highlight certain parts of the rule that may be of most interest to applicants, such as applicability, exemptions, and remanufacture requirements. This information is not all-inclusive and is not meant as a substitute for the actual rule. There may be applicability, exemptions, and requirements under the rule that are not highlighted below.

#### Affected Entities and Engines

Entities potentially affected by this rule are those that manufacture, remanufacture or import locomotives or locomotive engines; and those that own or operate locomotives and companies and persons that manufacture, sell, or import into the United States new marine compression ignition engines, companies and persons that rebuild or maintain these engines, companies and persons that make vessels that use such engines, and the owners/operators of such vessels.

The rule addresses all types of diesel locomotives—line-haul, switch, and passenger rail, and all types of marine diesel engines below 30 liters per cylinder displacement (hereafter referred to as "marine diesel engines"). These engines are used to power a wide variety of vessels, from small fishing and recreational boats to large tugs and Great Lakes freighters. They are also used to generate auxiliary vessel power, including on ocean-going ships.

#### Locomotives

The rule affects locomotives currently regulated under 40 CFR Part 92 or Part 1033. With some exceptions, the locomotive regulations apply for all locomotives originally built in or after 1973 that operate in the United States.

Some Class III Railroads are exempt from the remanufacture standards for existing fleets. The rule limits the category of small railroads which are exempt from the Tier 0, 1 and 2 remanufacturing requirements for existing fleets to those railroads that qualify as Class III railroads <u>and</u> that are not owned by a large parent company. Under the current Surface Transportation Board classification system, this exemption is limited to railroads having total revenue less than \$39,194,876 per year in 2018 (www.stb.dot.gov/econdata.nsf/Deflatorfactors?OpenView).

EPA estimates that nearly all of the locomotives in the Class I railroad fleets were originally manufactured in or after 1973 and are already subject to the Tier 0 or later standards.

Intercity passenger or commuter railroads are not included as railroads that are small businesses and are therefore subject to the rule.

#### Definitions under 40 CFR Part 92 and Part 1033

"New locomotive" or "new locomotive engine" – a locomotive or engine that has never been transferred to an ultimate purchaser or put into service; a locomotive or engine also becomes new if it is remanufactured or refurbished. Locomotives and engines that were originally manufactured before January 1, 1973 are not considered to become new when remanufactured

unless they have been upgraded (as defined by the rule). Locomotives that are owned and operated by a small railroad and that have never been certified (i.e. manufactured or remanufactured into a certified configuration) are not considered to become new when remanufactured.

"Remanufacture" - 1) To replace, or inspect and qualify, each and every power assembly (i.e. cylinder) of a locomotive or locomotive engine, whether during a single maintenance event or cumulatively within a five year period; or 2) To upgrade a locomotive or locomotive engine; or 3) To convert a locomotive or locomotive engine to enable it to operate using a fuel other than it was originally manufactured to use; or 4) To install a remanufactured engine or a freshly manufactured engine into a previously used locomotive; or 5) To repair a locomotive engine that does not contain power assemblies to a condition that is equivalent to or better than its original condition with respect to reliability and fuel consumption. Remanufacture also means the act of remanufacturing.

"Remanufactured locomotive" - either a locomotive powered by a remanufactured locomotive engine, a repowered locomotive, or a refurbished locomotive.

"Upgrade" - one of the following types of remanufacturing: 1) Repowering a locomotive that was originally manufactured prior to January 1, 1973; or 2) Refurbishing a locomotive that was originally manufactured prior to January 1, 1973 in a manner that is not freshly manufacturing; or 3) Modifying a locomotive that was originally manufactured prior to January 1, 1973 (or a locomotive that was originally manufactured on or after January 1, 1973, and that is not subject to the emission standards of this part), such that it is intended to comply with the Tier 0 standards.

"Repowered locomotive"- a locomotive that has been repowered with a freshly manufactured engine.

"Freshly manufactured locomotive" – a new locomotive that contains fewer than 25 percent (by value) previously used parts (i.e. contains 75% or more brand new parts); includes when an existing locomotive is substantially refurbished including the replacement of the old engine with a freshly manufactured engine.

"Refurbished locomotive" - a locomotive which contains more unused parts than previously used parts (i.e. contains 50% to 75% brand new parts). Note: Locomotives built before 1973 become "new" and thus subject to emission standards when refurbished (i.e. are not exempt from the rule requirements due to age of locomotive). In general, the rule requires refurbished switch locomotives to meet the Tier 0+ standards, and refurbished line-haul locomotives to meet Tier 2+/Tier 3 standards, even if the original locomotive was manufactured before 1973.

Remanufactured Locomotives: The rule sets new standards for the existing fleet of Tier 0, Tier 1, and Tier 2 locomotives, to apply at the time of remanufacture, if a certified remanufacture system is available.

To avoid confusion between the old standards and the new standards, EPA has adopted a simple approach whereby a Tier 0 locomotive remanufactured under the more stringent Tier 0 standards

adopted in the 2008 (current) rule will be designated a Tier 0+ locomotive. The same approach applies for Tier 1 and Tier 2 locomotives. That is, those remanufactured under the new standards would be called Tier 1+ and Tier 2+ locomotives, respectively. However, in many contexts, including a number of places in the final rule, there is really no need to make distinctions of this sort, as no ambiguity arises. In these contexts, it would be perfectly acceptable to drop the "+" designation and simply refer to Tier 0, 1, and 2 locomotives and standards.

<u>Switch Locomotives:</u> The rule includes standards and other provisions aimed at encouraging the replacement of old high-emitting units with newly-built or refurbished locomotives powered by very clean engines developed for the nonroad equipment market. For example, a provision applicable to switch locomotives allows a streamlined certification process.

Reduction of Locomotive Idling Emissions: The rule requires that an Automatic Engine Stop/Start System (AESS) be used on all new locomotives (see definition of "new locomotive" above).

<u>Voluntary Emissions Reductions:</u> The rules allow locomotive owners to voluntarily subject their pre-1973 locomotives to the Tier 0 standards or to include in the locomotive program low-horsepower locomotives that would otherwise be excluded based on their rated power. Additionally, the rule allows Tier 0 switch locomotives, which are normally not subject to line-haul cycle standards, to be voluntarily certified to the line-haul cycle standards. Also, the rule allows any locomotives to be voluntarily certified to a more stringent tier of standards. In doing so, the locomotives then become subject to the new remanufactured engine standards, at the point of first remanufacture under the new standards.

#### **Marine Engines**

The rule (marine existing fleet program) affects marine diesel engines and vessels regulated under 40 CFR Part 94 or Part 1042.

The marine existing fleet program applies only to those commercial marine propulsion and auxiliary diesel engines which meet the following criteria:

- C1 and C2 engines (i.e. per cylinder displacement up to 30 liters);
- Greater than 600 kW (800 HP);
- Tier 2 and earlier engines; and
- Built in model year 1973 or later.

Small vessel operators are exempt from the new standards for existing fleets. The requirements of the marine existing fleet program do not apply to owners of marine diesel engines or vessel operators with less than \$5 million in gross annual sales revenue. This threshold includes annual sales revenue from parent companies or affiliates of the owners/operators.

EPA estimates that about 4 percent of all C1 and C2 engines are subject to the marine existing fleet program and are likely to have certified kits available at the time of remanufacture.

#### Definitions under 40 CFR Part 94 or Part 1042

"Remanufacture" of a marine engine - the removal and replacement of all cylinder liners, either during a single maintenance event or over a five-year period. It should be noted that marine diesel engines are not considered to be remanufactured if the rebuilding process falls short of this definition (i.e. the cylinder liners are removed and replaced over more than a five-year period).

<u>Remanufactured Marine Engines</u>: When an engine is remanufactured, it must be certified as meeting the emission standards for remanufactured engines (by using a certified remanufacture system) unless there is no certified remanufacturing system available for that engine. If there is no certified system available at that time, there is no requirement.

A certified marine remanufacture system must achieve a 25 percent reduction in PM emissions compared to the engine's measured baseline emissions level (the emissions level of the engine as rebuilt according to the manufacturer's specification but before the installation of the remanufacture system) without increasing NOx emissions (within 5 percent).

If several certified systems are available, any of them may be used.

For engines on a rolling rebuild schedule (i.e., cylinder liners are not replaced all at once but are replaced in sets on a schedule of 5 or fewer years, for example 5 sets of 4 liners for a 20-cylinder engine on a 5-year schedule), the requirement is triggered at the time the remanufacture system becomes available, with the engine required to be in a certified configuration when the last set of cylinder liners is replaced. Any remanufacturing that occurs after the system is available needs to use the certified system, including remanufacturing that occurs on a rolling schedule over less than five years following the availability of the remanufacturing system. If the components of a certified remanufacture system are not compatible with the engine's current configuration, the program allows the owner to postpone the installation of the remanufacture system until the replacement of the last set of cylinder-liners, which would occur no later than five years after the availability of the system. At that time, all engine components must be replaced according to the certified remanufacture system requirements.

In general, remanufactured engines are considered to be "new" engines, and they remain new until sold or placed back into service after the replacement of the last cylinder liner. The standards do not apply for engines that are rebuilt without removing cylinder liners. For a new engine to be placed into service, it must be covered by a certificate of conformity.

Replacement with a Freshly Manufactured Engine: Under the marine diesel engine program, an engine manufacturer is generally prohibited from selling a marine engine that does not meet the standards that are in effect when that engine is produced. However, manufacturers are allowed to produce a new engine which meets an earlier tier of standards if the engine manufacturer makes a determination that an engine compliant with the current standards would not fit a particular vessel.

Specifically, in making the feasibility determination the engine manufacturer is required to consider all previous tiers and use any of their own engine models from the most recent tier that

meets the vessel's physical and performance requirements. If an engine manufacturer can produce an engine that meets a previous tier of standards representing better control of emissions than that of the engine being replaced, the manufacturer would need to supply the engine meeting the tier of standards with the lowest emissions levels. For example, if a Tier 1 engine is being replaced after the Tier 3 standards go into effect, the engine manufacturer would have to demonstrate why a Tier 2 as well as a Tier 3 engine cannot be used before a Tier 1 engine can be produced and installed. Similarly, for an engine built prior to 2004, the engine manufacturer would have to demonstrate why a Tier 1, Tier 2, or a Tier 3 engine cannot be used. It should be noted, in the case of Tier 0 engines, that MARPOL Annex VI prohibits replacing an existing engine at or above 130 kW with a freshly manufactured engine unless it meets the Tier 1 standards.

Replacement with an Existing Engine: The remanufacture requirements of the rule apply whether the owner is obtaining an identical existing (used) replacement engine due to an engine failure or through an engine exchange for a periodic engine rebuild. These requirements also apply if a vessel owner is obtaining a different model existing (used) replacement engine, for whatever reason. This means if the existing engine (greater than 600 kW that are built after 1973) that is the replacement engine is rebuilt and has all of its cylinder liners replaced, it will be required to be remanufactured using a certified remanufacture system if one is available for that engine.

# National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) (40 CFR Part 63 Subpart ZZZZ)

Stationary engine projects, such as energy producing generators and agricultural pumps, will not be considered for funding under this NOFO if the emissions reductions proposed for funding are required by EPA's RICE rule, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ). Under the RICE Rule provisions, the compliance requirements may be triggered by replacement or reconstruction of an engine.

Definition: Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

The RICE Rule applies to new and existing engines as described below:

- 1. Engines greater than 500 HP at a major source of Hazardous Air Pollutants (HAP):
  - Existing engines if constructed before December 19, 2002
  - o New engines if constructed on or after December 19, 2002
  - o Reconstructed engines if reconstruction began on or after December 19, 2002
- 2. Engines less than or equal to 500 HP at a major source of HAP and engines or all horsepower located at an area source of HAP:
  - o Existing engines if constructed before June 12, 2006
  - New engines if constructed on or after June 12, 2006
  - o Reconstructed engines if reconstruction began on or after June 12, 2006

EPA assumes most stationary source projects proposed under this NOFO will fall under #2, above.

#### Sufficient Justification

The applicant must demonstrate that the emissions reductions funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule and/or emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the RICE Rule but are in excess of (above and beyond) those required by the applicable mandate. In these cases, sufficient justification would include a summary of the rule applicability and an explanation of how the proposed emissions reductions from the target engines are achieved prior to any compliance dates and/or in are in excess of any emissions reductions required by the RICE Rule.

In general, the requirements for existing stationary RICE located at areas sources of HAP (found in Table 2d to Subpart ZZZ of Part 63) include carbon monoxide (CO) limits, maintenance and inspection requirements, and operation limits.

### **APPENDIX D – Application Submission Checklist**

The application package *must* include all of the following materials. Use this checklist to ensure that all required materials have been included in your application package.

☐ SF-424, Application for Federal Assistance		
☐ SF-424A, Budget Information for Non-Construction Programs		
☐ EPA Form 4700-4, Pre-Award Compliance Review Report for All Applicants Reques Federal Assistance		
□ EPA Form 5700-54, Key Contacts Form		
□ Project Narrative Attachment Form (not to exceed 14 pages)		
☐ Cover Page		
□ Workplan		
☐ 1. Project Summary and Approach		
☐ 2. Goods Movement		
☐ 3. Environmental Justice and Disadvantaged Communities		
☐ 4. Project Sustainability		
☐ 5. Resilience to Climate Impacts		
☐ 6. Workforce Development		
☐ 7. Environmental Results – Outputs, Outcomes and Performance Measures		
☐ 8. Programmatic Capability and Past Performance		
☐ 9. Budget Narrative and Detail		
☐ Applicant Fleet Description information (use "Other Attachments Form")		
☐ Emissions Reduction Calculations (use "Other Attachments Form")		
☐ Partnership Letters, if applicable (use "Other Attachments Form")		
☐ Mandated Measures Justification Supporting Information, if applicable (use "Other Attachments Form")		
□ Resumes ontional (use "Other Attachments Form")		