

AGENCY: ENVIRONMENTAL PROTECTION AGENCY (EPA)

TITLE: Clean Diesel Funding Assistance Program FY 2016

ACTION: Request for Proposals (RFP)

RFP NUMBER: EPA-OAR-OTAQ-16-02

CATALOG OF FINANCIAL DOMESTIC ASSISTANCE NUMBER: 66.039

IMPORTANT DATES

Thursday, February 25, 2016 RFP OPENS

Tuesday, April 26, 2016 RFP CLOSSES – PROPOSALS DUE

June 2016 ANTICIPATED NOTIFICATION OF SELECTION

October 1, 2016 ANTICIPATED AWARD

The closing date and time for receipt of proposals is **Tuesday, April 26, 2016, at 4:00 p.m. Eastern Time (ET) in order to be considered for funding.** Proposal packages must be submitted electronically to EPA through Grants.gov (www.grants.gov) no later than **Tuesday, April 26, 2016, at 4:00 p.m. (ET)** in order to be considered for funding.

SUMMARY

EPA's Office of Transportation and Air Quality is soliciting proposals nationwide for projects that achieve significant reductions in diesel emissions in terms of tons of pollution produced by diesel engines and diesel emissions exposure, particularly from fleets operating at or servicing goods movement facilities located in areas designated as having poor air quality. Further, priority for funding may be given to projects which result in outcomes that benefit affected communities, those that engage local communities with respect to the design and performance of the project, and those which can demonstrate the ability to promote and continue efforts to reduce emissions after the project has ended.

Eligible diesel emission reduction solutions include verified emission control technologies such as exhaust controls, cleaner fuels, and engine upgrades, verified idle reduction technologies, verified aerodynamic technologies and low rolling resistance tires, certified engine repowers, and/or certified vehicle or equipment replacement.

Eligible diesel vehicles, engines and equipment may include buses, Class 5 – Class 8 heavy-duty highway vehicles, marine engines, locomotives and nonroad engines, equipment or vehicles used in construction, handling of cargo (including at a port or airport), agriculture, mining or energy production (including stationary generators and pumps).

Eligible entities include regional, state, or local agencies, tribal governments (or intertribal consortia) and native villages, or port authorities, which have jurisdiction over transportation or air quality, and nonprofit organizations or institutions that: a) represent or provide pollution reduction or educational services to persons or organizations that own or operate diesel fleets or b) have, as their principal purpose, the promotion of transportation or air quality.

FUNDING / AWARDS

The total estimated funding for this competitive opportunity is approximately \$26 million. EPA regional offices will award the cooperative agreements for projects resulting from this announcement. EPA anticipates awarding one to four cooperative agreements per Region from this announcement, subject to availability of funds, the quality of proposals received, and other applicable considerations.

Summary of What EPA Will Fund

- **Verified Exhaust Control Technologies:** EPA will fund up to 100% of the cost (labor and equipment) of eligible verified exhaust control technologies.
- **Verified/Certified Engine Upgrades:** EPA will fund up to 40% of the cost (labor and equipment) of eligible engine upgrades.
- **Verified/Certified Cleaner Fuel Use:** EPA will not fund stand-alone cleaner fuels use. EPA will fund the cost differential between the eligible cleaner fuels and conventional diesel fuels if the cleaner fuels are used in combination, and on the same vehicles, with new eligible verified exhaust controls or eligible engine upgrades or eligible certified engine repowers or eligible certified vehicle/equipment replacements funded under this RFP, as described in Section I.B.2.
- **Verified Idle Reduction Technologies:** EPA will not fund stand-alone idle reduction technologies, except for idle reduction technologies on locomotives, shore connection systems and truck stop electrification technologies, or previously retrofitted school buses, as discussed below. EPA will fund up to 100% of the cost (labor and equipment) of an eligible, verified idle reduction technology if that technology is combined on the same vehicle with a new eligible verified exhaust control funded under this RFP, as described in Section I.B.2.a.
 - **Verified Idle Reduction Technologies on School Buses:** Funding can cover up to 100% of the cost (labor and equipment) of verified idle reduction technologies on school buses with model year 2006 or older engines that have been previously retrofitted with a verified emission control device.
 - **Verified Locomotive Idle Reduction Technologies:** EPA will fund up to 40% of the cost (labor and equipment) of eligible idle reduction technologies on locomotives.
 - **Verified Shore Connection Systems and Truck Stop Electrification Technologies:** EPA will fund up to 25% of the cost (labor and equipment) of eligible shore connection systems and truck stop electrification technologies.
- **Verified Aerodynamic Technologies and Low Rolling Resistance Tires:** EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. EPA will fund up to 100% of the cost (labor and equipment) of verified aerodynamic technologies or verified low rolling resistance tires if the technology is combined on the same vehicle with a new eligible verified exhaust control technology funded under this RFP, as described in Section I.B.2.a.
- **Certified Engine Repower:**
 - **Repower of Locomotive, Marine, and Nonroad Vehicles and Equipment:** EPA will fund up to 40% of the cost (labor and equipment) of a 2015 model year or newer engine certified to EPA emission standards. EPA will fund up to 60% of the cost (labor and equipment) of an all-electric repower.
 - **Repower of Highway Diesel Vehicles:** EPA will fund up to 40% of the cost (labor and equipment) of a 2015 model year or newer engine certified to EPA emission standards. EPA will fund up to 50% of the cost (labor and equipment) of a 2015 model year or newer engine that is certified to CARB's Optional Low-NOx Standard. EPA will fund up to 60% of the cost (labor and equipment) of an all-electric repower.

- **Certified Vehicle/Equipment Replacement:**
 - **Replacement of Locomotive and Nonroad Vehicles and Equipment:** EPA will fund up to 25% of the cost of a replacement vehicle or piece of equipment powered by a 2015 model year or newer engine certified to EPA emission standards. EPA will fund up to 45% of the cost of a new, all-electric nonroad vehicle or piece of equipment.
 - **Replacement of Highway Vehicles (other than drayage):** EPA will fund up to 25% of the cost of a replacement vehicle powered by a 2015 model year or newer engine certified to EPA emission standards. EPA will fund up to 35% of the cost of a replacement vehicle powered by a 2015 model year or newer engine certified to meet CARB’s Optional Low-NOx Standard. EPA will fund up to 45% of the cost of an all-electric replacement vehicle.
 - **Replacement of Drayage Trucks:** EPA will fund up to 50% of the cost of a replacement drayage truck powered by a 2011 model year or newer certified engine.

!! IMPORTANT – READ THIS FIRST !!

All applicants must submit their proposals electronically through www.grants.gov as explained in Appendix A. Proposals will NOT be accepted via e-mail, fax, standard 1st class mail delivery by U.S. Postal Service, express delivery service, or hand delivery.

The electronic submission of your application must be made by an official representative of your institution who is registered with Grants.gov and is authorized to sign applications for Federal assistance. For more information on the registration requirements that must be completed in order to submit an application through Grants.gov, go to www.grants.gov and click on “Applicants” on the top of the page and then go to the “Get Registered” link on the page. **If your organization is not currently registered with Grants.gov, please encourage your office to designate an Authorized Organization Representative (AOR) and ask that individual to begin the registration process as soon as possible. Please note that the registration process also requires that your organization have a DUNS number and a current registration with the System for Award Management (www.SAM.gov) and the process of obtaining both could take a month or more. 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 submission deadline.** Registration on Grants.gov, SAM.gov, and DUNS number assignment is FREE.

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
I. Funding Opportunity Description	
A. Background.....	5
B. Scope of Work.....	5
C. EPA Strategic Plan Linkage, Anticipated Outputs/Outcomes and Performance Measures.....	20
D. Supplementary Information.....	22
II. AWARD INFORMATION	
A. Available Funding.....	22
B. Partial Funding.....	23
C. Number of Awards	24
D. Project Period.....	24
E. Funding Type.....	24
III. ELIGIBILITY INFORMATION	
A. Eligible Entities.....	24
B. Cost-Share Requirement and Voluntary Cost-Share.....	25
C. Threshold Eligibility Criteria.....	27
D. Funding Restrictions.....	28
IV. PROPOSAL AND SUBMISSION INFORMATION	
A. Proposal Submission to EPA Regional Offices.....	30
B. Requirement to Submit to Grants.gov and Limited Exception Procedures.....	32
C. Grants.gov Application Submission Instructions.....	33
D. Content of Proposal Submission.....	34
E. Submission Date and Time.....	36
F. Pre-Proposal Assistance and Communications.....	36
G. Contracts and Subawards.....	37
H. Additional Provisions for Applicants Incorporated Into the Solicitation.....	38
V. PROPOSAL REVIEW INFORMATION	
A. Evaluation Criteria.....	38
B. Review and Selection Process.....	41
C. Other Factors.....	41
VI. AWARD ADMINISTRATION INFORMATION	
A. Award Notices.....	42
B. Administrative and National Policy Requirements.....	42
C. Reporting Requirement.....	43
D. Disputes.....	43
E. Additional Provisions for Applicants Incorporated Into the Solicitation.....	43
VII. AGENCY CONTACTS.....	43
Appendix A: Grants.gov Proposal Submission Instructions.....	45
Appendix B: Project Narrative Instructions, Format, and Content.....	48
Appendix C: Quantifying Environmental Outcomes	58
Appendix D: Mandated Measures Justification.....	62
Appendix E: Proposal Submission Checklist	71

I. FUNDING OPPORTUNITY DESCRIPTION

A. Background

Reducing emissions from diesel engines is one of the most important air quality challenges facing the country. In 2009, nationwide diesel emissions from mobile sources alone accounted for approximately 300,000 tons of directly emitted fine Particulate Matter (PM_{2.5}) and 6.4 million tons of oxides of nitrogen (NO_x), which contribute to the formation of ozone and additional fine particles. Despite EPA's diesel engine and fuel standards for new engines, the eleven million diesel engines already in use continue to emit large amounts of NO_x and PM_{2.5}, which contribute to serious public health problems, including asthma, lung cancer and various other cardiac and respiratory diseases. These problems result in thousands of premature deaths, millions of lost work days, and numerous other negative health impacts every year.

To protect public health and air quality by addressing these diesel emissions, the U.S. Environmental Protection Agency (EPA) established the National Clean Diesel Campaign (NCDC). NCDC promotes clean air strategies by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations and state and local officials to reduce diesel emissions and supports EPA's goal of furthering environmental justice by prioritizing emission 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.

The Diesel Emissions Reduction Act (DERA), codified at 42 U.S.C. 16131 *et seq.*, authorizes EPA to offer funding assistance to eligible entities on a competitive basis. Fiscal Year (FY) 2008 was the inaugural year of funding for the DERA program, and since then EPA has awarded funds to over 650 projects to reduce diesel emissions nationwide. Specific information on these funded projects can be found at: www.epa.gov/cleandiesel/clean-diesel-national-grants.

B. Scope of Work

A single proposal may target multiple fleets, fleet types and/or diesel emission reduction solutions.

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

a. Buses^{a,b};

Table 1: Buses Eligibility

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Vehicle Replacement: EMY 2015 or Newer	Engine Repower: EMY 2015 or Newer	Replacement or Repower: All-Electric
	+/- idle reduction					
1994-2006	Yes	Yes	Yes	Yes	Yes	Yes
2007 to 2010	No	No	Yes	No	No	Yes

b. Class 5 – Class 8 Heavy-duty Highway Vehicles^c;

Table 2: Class 5 – Class 8 Heavy-duty Highway Vehicles Eligibility

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Drayage Truck Replacement: EMY 2011 or Newer	Other Vehicle Replacement: EMY 2015 or Newer	Engine Repower: EMY 2015 or Newer	Replacement or Repower: All-Electric
	+/- idle reduction						
1994-2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007 to 2010	No	No	Yes	No	No	No	Yes

c. Marine Engines;

Table 3: Marine Engine Eligibility

Current Engine Tier	Engine Repower: Engine Model Year 2015 or Newer		Certified Remanufacture System	Verified Engine Upgrade
	Tier 1-2	Tier 3-4		
Unregulated – Tier 2	No	Yes	Yes	Yes
Tier 3 - 4	No	No	No	No

To be eligible, marine engines must operate more than 1000 hours per year.

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

^b For the purposes of this RFP, buses include and Class 5 – Class 8 transit buses (see footnote c, below).

^c For the purposes of this RFP, eligible heavy-duty highway vehicles are limited to Class 5 through Class 8: Class 5 (16,001 -19,500 lbs GVWR); Class 6 (19,501 - 26,000 lbs GVWR); Class 7 (26,001 - 33,000 lbs GVWR); Class 8a (33,001 - 60,000 lbs GVWR); Class 8b (60,001 lbs GVWR and over).

d. Locomotives;

Table 4: Locomotive Eligibility

Current Locomotive Tier	Replacement or Repower: Engine Model Year 2015 or Newer			Verified Exhaust Controls	Verified Idle-Reduction Technology
	Tier 0+ - 3	Tier 4	All-Electric	SCR	
Unregulated - Tier 2	No	Yes	Yes	No	Yes*
Tier 2+ switcher	No	Yes	Yes	Yes	Yes*
Tier 2+ line haul	No	No	No	Yes	Yes*

To be eligible, locomotives must operate more than 1000 hours per year.

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

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

- e. Nonroad engines, equipment or vehicles used in:
- 1) Construction;
 - 2) Handling of cargo (including at a port or airport);
 - 3) Agriculture;
 - 4) Mining; or
 - 5) Energy production (including stationary generators and pumps).

Table 5: Nonroad Engine Eligibility

Current Engine Horsepower	Current Engine Model Year (EMY)	Replacement or Repower: EMY 2015 or Newer			Verified Exhaust Control	Verified Engine Upgrade
		Tier 0 - 3	Tier 4	All-Electric		
0-50	2004 and Newer	No	Yes	Yes	Yes	Yes
51-300	1994 and Newer	No	Yes	Yes	Yes	Yes
301-99999	1984 and Newer	No	Yes	Yes	Yes	Yes

To be eligible, nonroad engines and equipment must operate more than 500 hours per year.

Note: Projects involving locomotives and marine engines will not be considered for funding under this RFP if the upgrade/remanufacture proposed for funding is required by EPA’s locomotive and marine rule, “Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder.” Also, projects involving stationary engines will not be considered for funding under this RFP if the emission reductions proposed for funding are required by EPA’s RICE rule, “National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ).

Proposals which include locomotives and/or marine engines and/or stationary engines must include a clear and concise justification for why/how the proposed emission reduction are not

subject to the Restriction for Mandated Measures under this RFP. The justification must clearly demonstrate that:

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

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

A "retrofit" project is defined broadly to include any technology, device, fuel or system that, when applied to an existing diesel engine, achieves emission reductions beyond what is currently required by EPA regulations at the time of the engine's certification.

Additional information about the diesel emission reduction solutions listed below, as well as technical tips and important points to consider, is available at www.epa.gov/sites/production/files/2015-09/documents/420p11001.pdf. **Technology changes may not be allowed after a proposal has been selected. If technology compatibility issues arise, EPA may elect to terminate the assistance agreement, at which time assistance funds must be returned to EPA.**

- a. Exhaust Controls:** Exhaust Controls include pollution control devices installed in the exhaust system (such as oxidation catalysts and particulate matter filters), or systems that include crankcase emission control (like a closed crankcase filtration system). This funding can cover up to 100% of the cost (labor and equipment) for an eligible verified emission control. EPA suggests that each applicant requesting diesel particulate filters data log the exhaust temperature of all vehicles to be considered before the application is submitted, so that there is evidence that the fleets can accommodate the technology.

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

- b. Engine Upgrades:** Generally, an engine upgrade involves the removal of parts on an engine during a rebuild and replacement with parts that cause the engine to represent an engine configuration which is cleaner than the original engine. Some nonroad and marine engines are able to be upgraded to reduce their emissions by applying manufacturer upgrades that

are retrofits currently verified by EPA or CARB as a package of components demonstrated to achieve specific levels of emission reductions. Some locomotives and marine engines are able to be upgraded through the application of a certified remanufacture system that is used to rebuild the engine to represent a cleaner engine configuration. Engine upgrades may not be available for all engines, and not all upgrades may achieve an emissions benefit. Proposals for upgrades should include a discussion of the availability of engine upgrade kits/systems and indicate the pre- and post-project emission standard levels of the engines in order to demonstrate that the upgrade will result in an emissions benefit.

Funding can cover up to 40% of the cost (labor and equipment) of an eligible nonroad, locomotive or marine engine upgrade. To be eligible for funding, the upgrade must either be a verified retrofit as described above, or a certified remanufacture system that will result in an emissions benefit by rebuilding the engine to a cleaner engine configuration. For an engine to be eligible for an upgrade, the engine must be currently operating and performing its intended function. If a certified remanufacture system for a locomotive includes a full engine replacement, the requirements below in Section f.2 (Repower Criteria) will apply.

A list of eligible, EPA verified engine upgrade technologies is available at: www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel. Lists of certified remanufacture systems for locomotives and marine engines, and additional information on remanufacture systems, are available at: www3.epa.gov/otaq/certdata.htm. Engine upgrades proposed for funding under this category must exist on one of these lists for the specific vehicle/engine application specified in the proposal at the time of proposal submission to EPA. If selected for funding, the actual engine upgrades used by the grant recipient must be specifically named on EPA's list of certified remanufacture systems or EPA or CARB's Verified Exhaust Control Technologies lists at the time of acquisition, and used only for the vehicle/engine applications specified on the lists, in order to be eligible for funding.

- c. **Cleaner Fuels Use:** Cleaner fuels include, but are not limited to, biodiesel, diesel emulsions or additives verified by EPA or CARB, compressed natural gas, propane and other certified alternative fuels. EPA will not fund stand-alone cleaner fuel use. For new or expanded use of a cleaner fuel, this funding can cover the cost differential between the cleaner fuel and conventional diesel fuel if that cleaner fuel is used in combination, and on the same vehicle, with a new eligible verified exhaust control or an eligible engine upgrade or an eligible certified engine repower or an eligible certified vehicle/equipment replacement funded under this RFP, as described in Section I.B.2.
- d. **Verified Idle Reduction Technologies:** An idle reduction project is generally defined as the installation of a technology or device that reduces unnecessary idling of diesel vehicles or equipment and/or is designed to provide services (such as heat, air conditioning, and/or electricity) to vehicles and equipment that would otherwise require the operation of the main drive or auxiliary engine(s) while the vehicle is temporarily parked or remains stationary. The reduction in idling will conserve diesel fuel and must also lower emissions.

Eligible, EPA SmartWay verified idle reduction technologies for trucks and school buses, locomotives, and marine applications are available at: www.epa.gov/verified-diesel-tech/smartway-technology. The types of idle reduction technologies proposed for funding under this category must exist on this list for the vehicle/engine application specified in the

proposal at the time of proposal submission to EPA. The technology categories include: auxiliary power units and generator sets, battery air conditioning systems, thermal storage systems, electrified parking spaces (truck stop electrification), fuel operated heaters, shore connection systems and alternative maritime power, shore connection systems for locomotives, and automatic shutdown/start-up systems for locomotives. If selected for funding, the actual idle reduction technologies used by the grant recipient must be specifically named on EPA's SmartWay Verified Technologies list at the time of acquisition, and used only for the vehicle/engine applications specified on the list, in order to be eligible for funding.

- 1) **Verified Idle Reduction Technologies on Locomotives:** Funding can cover up to 40% of the cost (labor and equipment) of eligible verified idle reduction technologies on locomotives. No funds awarded under this RFP shall be used for locomotive shore connection system projects that are expected to be utilized less than 1,000 hours/year. Automatic Engine Start-Stop technologies are only eligible to be installed on locomotives currently certified to Tier 0 or unregulated.
- 2) **Electrified Parking Spaces:** Electrified Parking Spaces ((EPS), also known as Truck Stop Electrification (TSE)) operates independent of the truck's engine and allows the truck engine to be turned off as the EPS system supplies heating, cooling, and/or electrical power. The EPS system provides off-board electrical power to operate either:
 - an independent heating, cooling, and electrical power system, or
 - a truck-integrated heating and cooling system, or
 - a plug-in refrigeration system that would otherwise be powered by an engine.

Funding can cover up to 25% of the cost (labor and equipment) of eligible electrified parking space technologies, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. Examples of eligible EPS costs include, but are not limited to, the purchase and installation of electrical infrastructure or equipment to enable heating, cooling, and the use of cab power for parked trucks, or to enable the use of power for transport refrigeration units (TRUs) and auxiliary power systems at distribution centers, intermodal facilities, and other places where trucks congregate. Examples of ineligible costs for EPS include, but are not limited to: on-board auxiliary power units and other equipment installed on trucks; equipment and services unrelated to heating and cooling (e.g., telephone, internet, television, etc.); TRUs; electricity costs; and operation and maintenance costs.

- 3) **Marine Shore Power Connection Systems:** Shore power systems allow maritime vessels to "plug into" an electrical power source instead of using diesel main or auxiliary engines while at port. This funding can cover up to 25% of the cost (labor and equipment) of eligible marine shore power connection systems, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. Examples of eligible marine shore power connection costs include, but are not limited to various components such as cables, cable management systems, shore power coupler systems, distribution control systems, transformers, grounding switches, service breakers, capacitor banks, and power distribution. Funding

may support new installations, or expansions of existing shore power systems. Examples of ineligible costs for marine shore power connection systems include, but are not limited to, shipside modifications to accept shore-based electrical power, electricity costs, and operation and maintenance costs. Due to the unique nature and custom design of marine shore power connection systems, EPA will review and approve the marine shore power connection system proposed by the applicant on a case by case basis.

- a) **Marine Shore Power Criteria:** Projects are eligible for funding on the condition that the following criteria are satisfied:
 - i. Applicants must attest to compliance with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems).
 - 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 utilized for more than 1,000 MW-hours per year. Smaller projects will be considered if the applicant can demonstrate cost/benefits.
 - iv. If the project proposal is selected for funding, the final design of the marine shore power connection system will require specific EPA approval prior to purchase and installation.
 - 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 utilize the shore power system, with limited exceptions for extreme circumstances.
- b) **Marine Shore Power Project Description:** Applicants proposing marine shore power connection systems should provide a project description that includes, but is not limited to:
 - i. the annual number of ship visits to berth where the shore power system is to be installed;
 - ii. average hoteling (or idling) time per visit; and
 - iii. information about the fleet of vessels that has, or will have, the ability to use the shore-side connection system, including:
 - the estimated annual number of ship visits to the shore power enabled berth that will utilize the shore power system;
 - estimated annual hoteling hours using shore power system;
 - fuel type and average sulfur content of fuel used in the auxiliary engines for each vessel;
 - auxiliary engine and boiler information for each vessel;
 - estimated annual hoteling load requirements (MW-hours);
 - iv. any documented commitment of visits and hours by the fleet of vessels that has, or will have, the ability to use the shore-side connection system; and
 - v. estimated emission reductions based on the methodology in Appendix C.

- 4) **Verified Idle Reduction Technologies on School Buses:** Funding can cover up to 100% of the cost (labor and equipment) of verified idle reduction technologies on school

buses with model year 2006 or older engines that have been previously retrofitted with a verified emission control device.

5) All Other Verified Idle Reduction Technologies: EPA will not fund stand-alone idle reduction technologies, except for use on locomotives, shore connection systems, or truck stop electrification technologies, or previously retrofitted school buses, as discussed above. This funding can cover up to 100% of the cost (labor and equipment) for all other eligible, verified idle reduction technologies, only if the technology is combined on the same vehicle with a new eligible verified exhaust control funded under this RFP, as described in Section I.B.2.a.

e. Verified Aerodynamic Technologies and Verified Low Rolling Resistance Tires: To improve fuel efficiency, long haul Class 8 trucks can be retrofitted with aerodynamic trailer fairings or the fairings can be provided as new equipment options. Certain tire models can provide a reduction in NOx emissions and fuel savings, relative to the “standard” new tires for long haul Class 8 trucks, when used on all axles.

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

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

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

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

EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. This funding, however, can cover up to 100% of the cost (labor and equipment) for verified aerodynamic technologies or verified low rolling resistance tires installed on long haul Class 8 trucks, if combined on the same vehicle with the new installation of one or more of the Verified Exhaust Controls funded under this RFP, as described in Section I.B.2.a.

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

- f. Certified Engine Repowers:** “Repower” refers to replacing an existing engine with a newer, cleaner engine or power source that is certified by EPA and, if applicable, CARB to meet a more stringent set of engine emission standards. Repower includes, but is not limited to, diesel engine replacement with an engine certified for use with diesel or a clean alternative fuel, diesel engine replacement with an electric power source (grid, battery or fuel cell^d), and/or diesel engine replacement with an electric generator(s) (genset). All-electric (i.e., zero emission) repowers do not require EPA or CARB certification.

The eligible cost of engine repower includes the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional, including related labor expenses. Charges for equipment and parts on engine repower projects are only eligible for funding if they are included in the certified engine configuration and/or are required to ensure the effective installation and functioning of the new technology, but are not part of typical vehicle or equipment maintenance or repair. Examples of ineligible engine repower costs include, but are not limited to: tires, cabs, axles, paint, brakes, and mufflers. For battery, fuel cell, and grid electric powered vehicle and equipment repowers, examples of eligible repower costs include, but are not limited to: electric motors, electric inverters, battery assembly, direct drive transmission/gearbox, regenerative braking system, vehicle control/central processing unit, vehicle instrument cluster, hydrogen storage tank, hydrogen management system, fuel cell stack assembly, and the purchase and installation of electrical infrastructure or equipment to enable the use of power. Examples of ineligible costs include, but are not limited to, electricity, and operation and maintenance costs.

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

1) Locomotive, Marine, and Nonroad Diesel Vehicles and Equipment:

- a)** Funding can cover up to 40% of the cost (labor and equipment) of a 2015 model year or newer engine certified to EPA emission standards. Nonroad engine emission standards are on EPA’s website at: www.epa.gov/sites/production/files/2016-03/documents/420b16022.pdf. Locomotive engine emission standards are on EPA’s website at: www.epa.gov/sites/production/files/2016-03/documents/420b16024.pdf. Marine engine emission standards are on EPA’s website at: www.epa.gov/sites/production/files/2016-03/documents/420b16025.pdf.
- b)** Funding can cover up to 60% of the cost (labor and equipment) of an all-electric repower.

2) Highway Diesel Vehicles:

- a)** Funding can cover up to 40% of the cost (labor and equipment) of a 2015 model year or newer engine certified to EPA emission standards. Highway engine emission standards are on EPA’s website at: www.epa.gov/emission-standards-reference-guide/heavy-duty-highway-engines-and-vehicles-emission-standards.

^d Hydrogen fuel cells are only eligible for repowers for eligible urban transit buses as defined in the RFP and eligible drayage trucks as defined in this RFP.

- b) Funding can cover up to 50% of the cost (labor and equipment) of a 2015 model year or newer engine that is certified to CARB’s Optional Low-NOx Standard of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NOx. Engines certified to CARB’s Optional Low NOx Standard may be found by searching CARB’s Executive Orders for Heavy-duty Engines and Vehicles, found at: www.arb.ca.gov/msprog/onroad/cert/cert.php.
 - c) Funding can cover up to 60% of the cost (labor and equipment) of an all-electric repower.
- 3) Repower Criteria: Repower projects are eligible for funding on the condition that the following criteria are satisfied:
- a) The repowered vehicle, engine or equipment must continue to perform the same function as before the repower.
 - b) The replacement engine must be of similar horsepower as the engine being replaced.
 - i. Nonroad: Horsepower increases of more than 25 percent will require specific approval by EPA prior to purchase, and the applicant may be required to pay the additional costs associated with the higher horsepower equipment.
 - ii. Highway: The engine’s primary intended service class must match the vehicle’s weight class (i.e. a LHD diesel engine is used in a vehicle with GVWR 16,001 – 19,500 pounds, a MHD diesel engine is used in a vehicle with a GVWR of 19,501 – 33,000 pounds, and an HHD diesel engine is used in a vehicle with a GVWR greater than 33,000 pounds.) Exceptions may be granted for vocational purposes, however the GVWR must stay within 10 percent of the engine’s intended service class and any exceptions will require specific EPA approval prior to purchase.
 - c) Repower Scrappage: The purchase of new engines to expand a fleet is not covered by this program.
 - i. The engine being replaced must be scrapped or rendered permanently disabled within 90 days of being replaced.
 - (a) If a Tier 3 nonroad vehicle/equipment is repowered, the Tier 3 engine may be retained or sold if the Tier 3 engine will replace a Tier 2 or lower nonroad engine in similar vehicle/equipment, and the Tier 2 or lower nonroad engine will be scrapped. The scrapped engine must currently be in service, operate more than 500 hours per year, and have a similar usage profile as the replaced engine. It is preferred that the scrapped engine currently operates within the same project location(s) as the repowered vehicle/equipment, however alternative scenarios will be considered. The term “project location” as used in this RFP refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior EPA approval.
 - ii. Cutting a three inch by three inch hole in the engine block is the preferred scrapping method. Other methods may be considered and will require prior EPA approval.
 - iii. Evidence of appropriate disposal is required in a final assistance agreement report submitted to EPA and includes a certificate of destruction and digital photos of the

engine tag (showing serial number, engine family number, and engine model year) and the destroyed engine block.

iv. If scrapped or salvaged engines are to be sold, program income requirements may apply.

d) **Early Attrition:** Repowers that would have occurred through normal attrition are considered to be the result of normal fleet turnover and are not eligible for funding under this program. Normal attrition is generally defined as a repower that is scheduled to take place within 3 years of the project start date. Normal attrition is typically defined by the vehicle or fleet owner's budget plan, operating plan, standard procedures, or retirement schedule. For example, if a nonroad fleet typically repowers its equipment after 20 years, a piece of equipment that is currently in its 18th or 19th year of service is not eligible for repower. A piece of equipment that is currently in its 17th year of service and has three years of service remaining (as defined by the fleet's repower schedule) is eligible for repower. Normal attrition does not include repowers that must occur due to a State or Local mandate.

Proposals which include repowers must include a detailed discussion of the fleet owner's normal attrition/engine repower schedule and must explain how the proposed emission reductions are not a result of vehicle/equipment repowers that would have occurred through normal attrition/engine repower within three years of the project start date.

g. **Vehicle and Equipment Replacements:** Nonroad and highway diesel vehicles and equipment can be replaced under this program with newer, cleaner vehicles and equipment that operate on diesel or alternative fuels and use engines certified by EPA and, if applicable, CARB to meet a more stringent set of engine emission standards. Replacement includes, but is not limited to, diesel vehicle/equipment replacement with newer, cleaner diesel, electric (grid, battery or fuel cell^e), hybrid or alternative fuel vehicles/equipment. All-electric (i.e. zero emission) vehicles and equipment do not require EPA or CARB certification.

The eligible cost of a replacement includes the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. The cost of additional "optional" components or "add-ons" that significantly increase the cost of the vehicle may not be eligible for funding under the grant; the replacement vehicle should resemble the replaced vehicle in form and function. For grid electric powered equipment replacements, examples of eligible replacement costs include, but are not limited to, the purchase and installation of electrical infrastructure or equipment to enable the use of power. Examples of ineligible costs include, but are not limited to, electricity, and operation and maintenance costs.

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

^e Hydrogen fuel cell vehicles and equipment are only eligible as replacements for eligible transit buses, drayage trucks, and forklifts, as defined in this RFP.

- 1) Locomotives and Nonroad Diesel Vehicles and Equipment:
 - a) Funding can cover up to 25% of the cost of a replacement vehicle or piece of equipment powered by a 2015 model year or newer engine certified to EPA emission standards. Nonroad engine emission standards are on EPA's website at: www.epa.gov/sites/production/files/2016-03/documents/420b16022.pdf. Locomotive engine emission standards are on EPA's website at: www.epa.gov/sites/production/files/2016-03/documents/420b16024.pdf.
 - b) Funding can cover up to 45% of the cost of a new, all-electric nonroad vehicle or piece of equipment.
- 2) Highway Diesel Vehicles (other than Drayage):
 - a) Funding can cover up to 25% of the cost of a replacement vehicle powered by a 2015 model year or newer engine certified to EPA emission standards. Highway engine emission standards are on EPA's website at: www.epa.gov/emission-standards-reference-guide/heavy-duty-highway-engines-and-vehicles-emission-standards.
 - b) Funding can cover up to 35% of the cost of a replacement vehicle powered by a 2015 model year or newer engine certified to meet CARB's Optional Low-NOx Standard of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NOx. Engines certified to CARB's Optional Low NOx Standard may be found by searching CARB's Executive Orders for Heavy-duty Engines and Vehicles, found at: www.arb.ca.gov/msprog/onroad/cert/cert.php.
 - c) Funding can cover up to 45% of the cost of an all-electric replacement vehicle.
- 3) Drayage Vehicles: Funding can cover up to 50% of the cost of a replacement drayage truck powered by a 2011 model year or newer certified engine.
 - a) Definition of Drayage Truck: A "Drayage Truck" means any Class 8 (GVWR greater than 33,000) highway vehicle operating on or transgressing through port or intermodal rail yard property for the purpose of loading, unloading or transporting cargo, such as containerized, bulk or break-bulk goods.
 - b) Drayage Operating Guidelines: If a proposal for the replacement of drayage trucks is selected for funding, the grant recipient will be required to establish guidelines to ensure that any existing truck replaced with grant funds has a history of operating on a frequent basis over the prior year as a drayage truck, and to ensure any new truck purchased with grant funds is operated in a manner consistent with the definition of a drayage truck, as defined above. For an example of sample guidelines, see www.epa.gov/sites/production/files/2016-02/documents/fy16-drayage-truck-sample-guideline.pdf.
 - c) Required/Scheduled Maintenance: EPA will fund the required/scheduled vehicle maintenance, as specified in the owner's manual, which is necessary to meet the warranty requirements for diesel particulate filters installed on drayage trucks. Funding for required maintenance is available for the duration of the project period.
- 4) Replacement Criteria: Replacement projects are eligible for funding on the condition that the following criteria are satisfied:

- a) The replacement vehicle/equipment must perform the same function as the vehicle/equipment that is being replaced (e.g., an excavator used to dig pipelines would be replaced by an excavator that continues to dig pipelines).
- b) The replacement vehicle/equipment must be of the same type and similar gross vehicle weight rating or horsepower as the vehicle/equipment being replaced.
 - i. Nonroad: Horsepower increases of more than 25 percent will require specific approval by EPA prior to purchase, and the applicant may be required to pay the additional costs associated with the higher horsepower equipment.
 - ii. Highway: The replacement vehicle must not be in a larger weight class than the existing vehicle (Class 5, 6, 7, or 8). The engine's primary intended service class must match the replacement vehicle's weight class (i.e. a LHD diesel engine is used in a vehicle with GVWR 16,001 – 19,500 pounds, a MHD diesel engine is used in a vehicle with a GVWR of 19,501 – 33,000 pounds, and an HHD diesel engine is used in a vehicle with a GVWR greater than 33,000 pounds.) Exceptions may be granted for vocational purposes, however the GVWR must stay within 10 percent of the engine's intended service class and any exceptions will require specific EPA approval prior to purchase.
- c) Replacement Scrappage: The purchase of new vehicles or equipment to expand a fleet is not covered by this program.
 - i. The vehicle or equipment being replaced must be scrapped or rendered permanently disabled within 90 days of being replaced.
 - (a) If a Tier 3 nonroad vehicle/equipment is replaced, the Tier 3 equipment may be retained or sold if the Tier 3 equipment will replace a similar Tier 2 or lower vehicle/equipment, and the Tier 2 or lower nonroad equipment will be scrapped. The scrapped equipment must currently be in service, operate more than 500 hours per year, and have a similar usage profile as the replaced equipment. It is preferred that the scrapped equipment currently operates within the same project location(s) as the replaced vehicle/equipment, however alternative scenarios will be considered. The term "project location" as used in this RFP refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior EPA approval.
 - ii. Disabling the chassis by cutting the vehicle's frame rails completely in half and cutting a three inch by three inch hole in the engine block is the preferred scrapping method. Other methods may be considered and will require prior EPA approval.
 - iii. Evidence of appropriate disposal is required in a final assistance agreement report submitted to EPA and includes a certificate of destruction and digital photos of the engine tag (showing serial number, engine family number, and engine model year), the destroyed engine block, and cut frame rails or other cut structural components as applicable.
 - iv. Equipment and vehicle components that are not part of the engine or chassis may be salvaged from the unit being replaced (e.g. plow blades, shovels, seats, tires, etc.). If scrapped or salvaged vehicles/parts are to be sold, program income requirements apply.

- d) **Early Attrition:** Replacements that would have occurred through normal attrition are considered to be the result of normal fleet turnover and are not eligible for funding under this program. Normal attrition is generally defined as a replacement that is scheduled to take place within 3 years of the project start date. Normal attrition is typically defined by the vehicle or fleet owner’s budget plan, operating plan, standard procedures, or retirement schedule. For example, if a school bus fleet typically retires vehicles after 20 years, a bus that is currently in its 18th or 19th year of service is not eligible for replacement. A bus that is currently in its 17th year of service and has three years of service remaining (as defined by the fleet’s retirement schedule) is eligible for replacement. Normal attrition does not include replacements that must occur due to a State or Local mandate. **Proposals which include replacements must include a detailed discussion of the fleet owner’s normal attrition schedule and must explain how the proposed emission reductions are not a result of vehicle/equipment replacements that would have occurred through normal attrition/fleet turnover within three years of the project start date.**

3. **DERA Programmatic Priorities:** The principal objective of the assistance to be awarded under this program is to achieve significant reductions in diesel emissions in terms of tons of pollution produced and reductions in diesel emissions exposure from vehicles, engines and equipment operating at or servicing goods movement facilities located in areas designated as having poor air quality. Further, priority for funding may be given to projects which address the needs and concerns of local communities, those that engage local communities with respect to the design and performance of the project, and those which can demonstrate the ability to promote and continue efforts to reduce emissions after the project has ended. All proposals will be evaluated to determine the extent and quality to which they meet the DERA programmatic priorities through the specific evaluation criteria described below and in Section V.

- a. **Priority Location – Areas of Poor Air Quality:** Under Section V, Criterion #2, proposals will be evaluated based on the location of the project. The DERA program places a priority on projects that are located in areas of poor air quality and that have the highest emissions from diesel engines.

The term “project location” as used in this RFP refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized. If a single proposal includes vehicles operating in more than one county the workplan should indicate where each vehicle operates and the amount (%) of time spent in each county.

A list of priority counties that will receive points under Section V, Criterion #2.B and C of this RFP can be found at: www.epa.gov/sites/production/files/2016-01/documents/fy16-county-area-list.pdf. Vehicles or equipment proposed for funding under this RFP must be operated a majority of the time in one of the priority counties listed in order to receive points under Section V, Criterion #2.B and C of this RFP. These counties were identified as priority locations for the DERA program because they are:

- 1) Designated, as of the release date of this RFP, as Nonattainment Areas or Maintenance Areas for the following National Ambient Air Quality Standards. Data is sourced from

EPA's Green Book of Nonattainment Areas for Criteria Pollutants.
(www.epa.gov/oaqps001/greenbk/).

- a) PM_{2.5} 1997 Standard (Annual: 15 µg/m³, 24-hour: 65 µg/m³)
- b) PM_{2.5} 2006 Standard (Annual: 15 µg/m³, 24-hour: 35 µg/m³)
- c) PM_{2.5} 2012 Standard (Annual: 12 µg/m³, 24-hour: 35 µg/m³)
- d) Ozone (O₃) 2008 Standard (8-hour: 0.075ppm)

- 2) Where all or part of the population is exposed to more than 2.0 µg/m³ of diesel particulate matter emissions. Data is sourced from the 2011 National-Scale Air Toxics Assessment (www.epa.gov/national-air-toxics-assessment/2011-national-air-toxics-assessment).

b. Priority Sector – Goods Movement: Under Section V, Criterion #3.B and C, priority may be given to projects based on whether the vehicles/engines/equipment targeted for diesel emission reductions are located at, or service, goods movement facilities such as:

- 1) ports (e.g. a cities, towns, or other places alongside navigable water with facilities for the loading and unloading of cargo from ships; places from which aircraft operate that have paved runways and cargo terminals which include baggage-movement operations; places where foreign goods are inspected by customs officers and allowed to pass into and out of a country)
- 2) rail yards (e.g. places at which trains originate or terminate, or at which they are distributed or combined)
- 3) terminals (e.g. freight 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)
- 4) distribution centers (e.g. facilities that perform consolidation, warehousing, packaging, decomposition and other functions linked with handling freight, often in proximity to major transport routes or terminals, and which generate large amounts of truck traffic)

c. Benefits to the Community: Under Section V, Criteria #4, priority may be given to projects which will address the needs and concerns of local communities, including any communities or populations that have faced or are facing environmental justice concerns and/or other interested parties, groups, or populations that are, or have been, affected by the environmental and/or other issues that the project is intended to address. The term “environmental justice concerns,” as used in this solicitation, generally relates to issues that have resulted in some communities and/or populations being more adversely, disproportionately and/or historically impacted by environmental issues and problems than other communities because of geography, poverty, income levels and similar types of factors.

The extent that a project will maximize public health benefits depends on both the population, community or group that will experience improvements in air quality due to the project, and the amount of emission reductions that will take place. Proposals should therefore describe both the population, community or group that will be affected by the project and how they will directly benefit from emission reductions that will result from the project.

Note: Factors potentially indicating disproportionate impacts include: differential proximity and exposure to environmental hazards; greater susceptibility to adverse effects from

environmental hazards (due to genetic predisposition, age, chronic medical conditions, lack of health care access, or poor nutrition); unique environmental exposures because of practices linked to cultural background or socioeconomic status (*e.g.*, subsistence fishing or farming); cumulative effects from multiple stressors; reduced ability to effectively participate in decision-making processes (due to language barriers, inability to access traditional communication channels, or limited capacity to access technical and legal resources); and degraded physical infrastructure, such as poor housing, poorly maintained public buildings (*e.g.*, schools), or lack of access to transportation.

- d. Community Engagement and Partnerships:** Under Section V, Criteria #5, proposals will be evaluated based on the extent and quality of the applicant's efforts and plans for engaging local communities with respect to the design and performance of the project and obtaining support from project partners to more effectively perform the project. Applicants will be evaluated on their approach for incorporating community input throughout the design and performance of the project, and/or whether their design of the proposed project involved and incorporated community input. Community engagement and partnership efforts should include various organizations representing a broad spectrum of the community; examples include grassroots, neighborhood, school, faith-based, city council, business, local government, and other organizations. Proposals that can demonstrate recent involvement of project partners and community members working together on projects may be evaluated more favorably than others. Proposals with letters of commitment that demonstrate strong, long-term involvement throughout the project from a variety of project partners may also be evaluated more favorably than others.
- e. Project Sustainability:** Under Section V, Criteria #6, proposals will be evaluated based on the extent and quality to which the applicant can demonstrate its ability to promote and continue efforts to reduce emissions after EPA funding for this project has ended. This could include, but is not limited to: the project's inclusion in a broader-based environmental or air quality plan; the implementation of idle-reduction policies; the implementation of contract specifications requiring the use of cleaner vehicles and equipment; or a documented commitment to continue to identify and address air quality issues in the affected community.

C. EPA Strategic Plan Linkage, Anticipated Outputs/Outcomes and Performance Measures

Pursuant to Section 6a of EPA Order 5700.7, "Environmental Results under EPA Assistance Agreements," EPA must link proposed assistance agreements with the Agency's Strategic Plan. EPA also requires that grant applicants and recipients adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7, Environmental Results under Assistance Agreements, www.epa.gov/sites/production/files/2015-03/documents/epa_order_5700_7a1.pdf).

- 1. Linkage to EPA Strategic Plan:** All proposals must support progress towards EPA's 2014-2018 Strategic Plan Goal 1, 'Addressing Climate Change and Improving Air Quality,' Objective 1.2, 'Improve Air Quality,' which states, "achieve and maintain health-and welfare-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants." Specifically, the proposed activities must reduce emissions from diesel fleets, thereby reducing local and regional air pollution of criteria pollutants, air toxics, and greenhouse gases.

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

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

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

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

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

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

Progress reports and a final report will also be required outputs, as specified in Section VI.C “Reporting Requirement,” of this RFP.

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

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

- Tons of pollution reduced over the lifetime of the vehicles/engines/equipment, specifically:
 - fine particulate matter (PM_{2.5}),
 - nitrogen oxides (NO_x),
 - greenhouse gases (GHG) such as carbon dioxide (CO₂) and black carbon, and/or
 - volatile organic compounds (VOCs).
- net reduction in gallons of diesel fuel used;
- benefits to the communities affected by the project, including improvements to human health and the environment, the local economy, social conditions, and the welfare of residents in such communities.

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

- community engagement and partnership;
- improved ambient air quality;
- health benefits achieved;
- changes in driver behavior regarding idling practices;
- an increased understanding of the environmental or economic effectiveness of the implemented technology;
- increased public awareness of project and results;
- widespread adoption of the implemented technology;
- demonstration and deployment of zero and near-zero emission vehicles and engines; and/or
- emission 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 proposal. These performance measures will help gather insights and will be the mechanism to track progress concerning successful processes and output and outcome strategies and will provide the basis for developing lessons to inform future recipients. It is expected that the description of performance measures will include the following:

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

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

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

D. Supplementary Information

The Diesel Emissions Reduction National Program (DERA) is authorized by Title VII, Subtitle G of the Energy Policy Act of 2005 (Public Law 109-58), as amended and reauthorized by the Diesel Emissions Reduction Act of 2010 (Public Law 111-364) and codified at 42 USC 16131 *et seq.*

II. AWARD INFORMATION

A. What is the amount of funding available?

EPA anticipates awarding a total of approximately \$26 million under this announcement, subject to the availability of funds, the quality of proposals received, and other applicable considerations. Applicants must indicate in their proposal the EPA regional office from which they are requesting funding. Applicants should request funding from the EPA regional office which covers their geographic project location. The term “project location” as used in this RFP refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized. The geographic boundaries for each EPA regional office are defined in Section IV.A of the RFP. Each proposal should have the EPA Region from which they are requesting funding clearly listed on the Cover Page of the Project Narrative.

The amount of federal funding requested by an applicant must not exceed the upper limit of the funding ranges specified below for each Region.

1. Region 1: \$100,000 - \$800,000. Proposals requesting EPA funding in excess of \$800,000 will NOT be considered.
2. Region 2: \$500,000 - \$1,800,000. Proposals requesting EPA funding in excess of \$1,800,000 will NOT be considered.
3. Region 3: \$750,000 - \$2,700,000. Proposals requesting EPA funding in excess of \$2,700,000 will NOT be considered.
4. Region 4: \$300,000 - \$1,900,000. Proposals requesting EPA funding in excess of \$1,900,000 will NOT be considered.
5. Region 5: \$500,000 - \$2,500,000. Proposals requesting EPA funding in excess of \$2,500,000 will NOT be considered.
6. Region 6: \$400,000 - \$2,700,000. Proposals requesting EPA funding in excess of \$2,700,000 will NOT be considered.
7. Region 7: \$300,000 - \$1,500,000. Proposals requesting EPA funding in excess of \$1,500,000 will NOT be considered.
8. Region 8: \$300,000 - \$1,500,000. Proposals requesting EPA funding in excess of \$1,500,000 will NOT be considered.
9. Region 9: \$500,000 - \$4,400,000. Proposals requesting EPA funding in excess of \$4,400,000 will NOT be considered.
10. Region 10: \$300,000 - \$800,000. Proposals requesting EPA funding in excess of \$800,000 will NOT be considered.

B. Partial Funding

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

C. How many agreements will EPA award in this competition?

It is anticipated that approximately 1-4 cooperative agreements will be made per Region from this announcement subject to the availability of funds, the quality of proposals received, and other applicable considerations.

EPA reserves the right to make additional awards under this announcement, consistent with Agency policy and other applicable considerations, if additional funding becomes available after the original selections. Any additional selections for awards will be made no later than six months from the date of the original selections.

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

D. What is the project period for awards resulting from this solicitation?

The estimated project period for awards resulting from this solicitation is expected to begin on October 1, 2016, with an expected project completion date no later than December 31, 2018.

E. Funding Type

The funding for selected projects will be in the form of a cooperative agreement. Cooperative agreements permit 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 will be:

- close monitoring of the successful applicant's performance to verify the results proposed by the applicant;
- collaboration during performance of the scope of work;
- 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); and
- review and comment on reports prepared under the cooperative agreement (the final decision on the content of reports rests with the recipient).

III. ELIGIBILITY INFORMATION

A. Eligible Entities

Under this solicitation, only the following entities are eligible to apply for assistance, in accordance

with 42 U.S.C. 16131 and CFDA 66.039:

1. A regional, State, or local agency, tribal government (or intertribal consortium) or native village, or port authority, which has jurisdiction over transportation or air quality.
2. A nonprofit organization or institution that:
 - represents or provides pollution reduction or educational services to persons or organizations that own or operate diesel fleets; or
 - has, as its principal purpose, the promotion of 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 the definition above.

Non-profit organization, as defined by 2 CFR 200.70, means any corporation, trust, association, cooperative or other organization, not including Institutions of Higher Education 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 or expand its operations. While defined separately than “non-profit organization(s)” by 2 CFR Part 200, Institutions of Higher Education, hospitals, state, local and federally-recognized Indian tribal governments are, nevertheless, eligible to submit proposals under this RFP to the extent they fall within the definition above.

For-profit organizations are not 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 are not eligible to apply.

For the purposes of this RFP, “intertribal consortium” is defined as a partnership between two or more tribes 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.

Please note that although tribes are eligible to apply for funding under this RFP, the National Clean Diesel Campaign also expects to issue a separate \$1 million, 2016 DERA Tribal Competition Request for Proposals (RFP) in March, 2016. Please visit the following webpage for more information: www.epa.gov/cleandiesel/clean-diesel-tribal-grants#rfp.

B. Cost-Share Requirement and Voluntary Cost-Share

Any form of cost-share, mandatory or voluntary, must be included in the Budget Detail portion of the Work Plan, and the proposal 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 project partner, a letter of commitment is required. Only eligible

and allowable costs may be used for cost-share. Other federal grants may not be used as cost-share under this RFP 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.

- 1. Mandatory Cost-Share Requirement:** Projects involving engine upgrades, certain idle reduction technologies, shore connection systems, truck stop electrification technologies, certified engine repowers, or certified vehicle/equipment replacements, as defined in Sections I.B.2. b, d, f, and g of this RFP, are subject to the following funding limitations and mandatory cost-share requirements:
 - a. Engine Upgrades:** EPA will fund up to 40% of the cost (labor and equipment) of an eligible engine upgrade (i.e. applicants are responsible for cost-sharing at least 60% of the cost of an eligible engine upgrade).
 - b. Idle Reduction Technologies on Locomotives:** EPA will fund up to 40% of the cost (labor and equipment) of an eligible idle reduction technology on a locomotive (i.e. applicants are responsible for cost-sharing at least 60% of the cost of an eligible idle reduction technology on a locomotive).
 - c. Shore Connection Systems and Truck Stop Electrification Technologies:** EPA will fund up to 25% of the cost (labor and equipment) of an eligible shore connection system or truck stop electrification technology (i.e. applicants are responsible for cost-sharing at least 75% of the cost of an eligible shore connection system or truck stop electrification technology).
 - d. Certified Engine Repower:** EPA will fund up to 40% of the cost (labor and equipment) of an eligible engine repower with a 2015 model year or newer engine certified to EPA emission standards (i.e. applicants are responsible for cost-sharing at least 60% of the cost). EPA will fund up to 50% of the cost (labor and equipment) of an eligible repower with a 2015 model year or newer engine certified to CARB's Optional Low-NOx Standard (i.e. applicants are responsible for cost sharing at least 50% of the cost). EPA will fund up to 60% of the cost (labor and equipment) of an eligible all-electric repower (i.e. applicants are responsible for cost sharing at least 40% of the cost).
 - e. Certified Vehicle/Equipment Replacement:**
 - 1) Locomotive and Nonroad Diesel Vehicles and Equipment:** EPA will fund up to 25% of the cost of an eligible vehicle or piece of equipment powered by a 2015 model year or newer engine certified to EPA emission standards (i.e. applicants are responsible for cost-sharing at least 75% of the cost). EPA will fund up to 45% of the cost of an eligible all-electric vehicle or piece of equipment (i.e. applicants are responsible for cost-sharing at least 55% of the cost).
 - 2) Highway Diesel Vehicles:** EPA will fund up to 25% of the cost of an eligible vehicle powered by a 2015 model year or newer engine certified to EPA emission standards (i.e. applicants are responsible for cost-sharing at least 75% of the cost). EPA will fund up to 35% of an eligible vehicle with a 2015 model year or newer engine certified to meet CARB's Optional Low-NOx Standard (i.e. applicants are responsible for cost-sharing at least 65% of the cost). EPA will fund up to 45% of the cost of an eligible all-electric vehicle (i.e. applicants are responsible for cost-sharing at least 55% of the cost).
 - 3) Drayage Vehicle Replacement:** EPA will fund up to 50% of the cost of an eligible drayage truck powered by a 2011 model year or newer certified engine (i.e., applicants are responsible for cost-sharing at least 50% of the cost).

Proposals that include projects to which these mandatory cost-share requirements apply must demonstrate, by the proposal submission date, on the SF-424 Application for Federal

Assistance, on the SF-424A Budget Information, 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 proposal 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 in Section A, Section B line 6.d, and Section C of the SF-424A.

There is no requirement for a cost-share contribution from applicants for projects involving Verified Emission Control Technologies as defined in Section I.B.2.a. There is no requirement for a cost-share contribution from applicants for projects involving certain idle reduction technologies as defined in Section I.B.2.d.

- 2. Voluntary Cost-Share:** Voluntary cost share is a form of leveraging. Leveraging is generally when an applicant proposes to provide its own additional funds/resources or those from third party sources to support or complement the project they are awarded under the competition which are above and beyond the EPA grant funds awarded.

While it is not required that an applicant provide a voluntary cost-share (or overmatch if a mandatory cost share applies) beyond EPA's funding and/or any mandatory cost-share as described above, applicants may provide a voluntary cost-share or overmatch to improve the environmental outputs and outcomes of the project.

If proposed, the voluntary cost-share or overmatch 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 voluntary cost-shared or overmatch funds must also be indicated in Sections A-C of the SF-424A. **If EPA accepts an offer for a voluntary cost-share or overmatch, applicants must meet this funding commitment as a legal condition of receiving EPA funding.** The recipient is legally obligated to meet any proposed voluntary cost-share or overmatch that is included in the approved project budget because the grant agreement includes the voluntary cost-share or overmatch. If it does not materialize during grant performance, then EPA may reconsider the legitimacy of the award and/or take other appropriate action as authorized by 2 CFR Part 200 as applicable.

C. Threshold Eligibility Criteria

These are requirements that if not met by the time of proposal submission will result in elimination of the proposal from consideration for funding. Only proposals from eligible applicants (see Section III.A of this RFP) that meet all of these threshold eligibility will be evaluated against the ranking criteria in Section V of this RFP. Applicants deemed ineligible for funding consideration as a result of the threshold eligibility review will be notified within 15 calendar days of the ineligibility determination.

1. Proposal Content and Submission

- Proposals must substantially comply with the proposal submission instructions and proposal content requirements set forth in Section IV and Appendix B of this RFP or else they will be rejected.
- Where a page limit is expressed in Section IV of this RFP with respect to the Project Narrative, pages in excess of the page limitation will not be reviewed.

- Proposals must be submitted through Grants.gov as stated in Section IV of this announcement (except in the limited circumstances where another mode of submission is specifically allowed for as explained in Section IV) on or before the proposal submission deadline published in Section IV of this announcement. Applicants are responsible for following the submission instructions in Section IV of this announcement to ensure that their proposal is timely submitted.
 - Proposals submitted after the submission deadline will be considered late and deemed ineligible without further consideration unless the applicant can clearly demonstrate that it was late due to EPA mishandling or because of technical problems associated with Grants.gov or relevant SAM.gov system issues. An applicant's failure to timely submit their proposal 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 late submission.
2. Proposals must support Goal 1 of EPA's 2014-2018 Strategic Plan, Take Action on Climate Change and Improving Air Quality; Objective 1.2: Improve Air Quality. (See Section I.C.)
 3. Proposals that do not include one or more of the eligible diesel emissions reduction solutions set forth in Section I.B.2 of this RFP are not eligible and will not be reviewed.
 4. Proposals that do not demonstrate compliance with the mandatory cost-share requirements described in Section III.B.1 of this RFP are not eligible and will not be reviewed.
 5. Proposals which request EPA assistance funds in excess of the applicable regional amounts specified in Section II.A of this RFP are not eligible and will not be reviewed.

Applicants can submit a total of three (3) proposals overall under this solicitation. Each proposal must be for a different project and must be submitted separately. An applicant cannot submit two proposals that both request funding for the same project (i.e. the same target fleet or group of fleets). If an applicant submits more than three (3) proposals to EPA, or more than one (1) proposal requests funding for the same project, the applicant will be contacted prior to EPA review of any of the proposals to determine which proposal(s) the applicant will withdraw from the competition. A single proposal may target multiple fleets, fleet types and/or diesel emission reduction solutions.

6. Proposals for emission reductions from locomotives and/or marine engines and/or stationary engines that do not include a "Mandated Measures Justification" in Section 1 of the Project Narrative, as described in Section III.D.1 and Appendix D of this RFP, are not eligible and will not be reviewed.

D. Funding Restrictions

If a submitted proposal includes any of the following ineligible activities, that portion of the proposal will be ineligible for funding and may render the entire proposal ineligible for funding.

1. **Restriction for Mandated Measures:** Pursuant to 42 U.S.C. 16132(d)(2), no funds awarded under this RFP shall be used to fund the costs of emission reductions that are mandated under federal law. The restriction applies when the mandate takes effect (the effective date) for any affected vehicles, engines or equipment. This restriction does not apply to a mandate in a State

Implementation Plan approved by the Administrator under the Clean Air Act. Voluntary or elective emission reduction measures shall not be considered “mandated,” regardless of whether the reductions are included in the State Implementation Plan.

2. No funds awarded under this RFP shall be used for matching funds for other federal grants, lobbying, or intervention in federal regulatory or adjudicatory proceedings, and cannot be used to sue the Federal Government or any other government entity.
3. No funds awarded under this RFP shall be used to cover expenses incurred prior to the project period set forth in any assistance agreement resulting from this RFP. Additionally, expenses incurred prior to the project period set forth in any assistance agreement resulting from this RFP are not eligible as a cost-share for proposed projects.
4. Technology changes may not be allowed after a proposal has been selected for funding. If technology compatibility issues arise during the course of the project, EPA may elect to terminate the assistance agreement, at which time assistance funds must be returned to EPA.
5. No funds awarded under this RFP shall be used for retrofit technologies on EPA’s or CARB’s, “Formerly Verified Technologies” lists. EPA’s formerly verified list can be found at: www.epa.gov/verified-diesel-tech/list-formerly-verified-technologies-clean-diesel, and CARB’s formerly verified lists can be found at: www.arb.ca.gov/diesel/verdev/vt/fv1.htm, www.arb.ca.gov/diesel/verdev/vt/fv2.htm, and www.arb.ca.gov/diesel/verdev/vt/fv3.htm.
6. No funds awarded under this RFP shall be used for emissions testing and/or air monitoring activities (including the acquisition cost of emissions testing equipment), or research and development.
7. No funds awarded under this RFP shall be used for fueling infrastructure, such as that used for the production and/or distribution of biodiesel, compressed natural gas, liquefied natural gas, and or other fuels.
8. Low rolling resistance tires may be used with lower-weight aluminum wheels to further improve fuel savings; however, no funds awarded under this RFP shall be used for the purchase of aluminum wheels except where a fleet is retrofitting from standard dual tires to SmartWay-verified single-wide low rolling resistance tires. In this case, the cost of aluminum single-wide wheels would be acceptable as additional equipment necessary to use the SmartWay verified technology, as would the cost of steel or light weight steel single-wide wheels.
9. No funds awarded under this RFP shall be used for the purchase of exhaust controls, low rolling resistance tires or advanced aerodynamic technologies if similar technologies have previously been installed on the truck or trailer.
10. No funds awarded under this RFP shall be used for the purchase of APUs or generators for vehicles with 2007 or newer certified engine configurations on long haul Class 8 vehicles.
11. No funds awarded under this RFP shall be used to retrofit, repower, upgrade, or replace a bus or Class 5 – Class 8 heavy-duty highway vehicle that is a model year 1993 vehicle or older.

12. With regard to Class 5 – Class 8 heavy-duty highway vehicles and transit buses, no funds awarded under this RFP shall be used to retrofit engine model year 2007 or newer with DOCs or DPFs, or retrofit engine model year 2011 or newer with SCR, or replace or repower engine model year 2007 or newer with anything other than all-electric (zero-emission).
13. No funds awarded under this RFP shall be used to retrofit, repower, upgrade or replace a nonroad engine or equipment that is 50 HP or less and engine model year 2003 or older, or between 51-300 HP and engine model year 1993 or older, or 301 HP or greater and engine model year 1983 or older.
14. No funds awarded under this RFP shall be used to retrofit, repower, replace or upgrade nonroad engines and equipment that operate less than 500 hours per year.
15. No funds awarded under this RFP shall be used to repower or replace nonroad Tier 0 (unregulated), Tier 1, Tier 2, or Tier 3 engines to a nonroad Tier 3 or lower nonroad engine standard.
16. No funds awarded under this RFP shall be used to repower, replace or upgrade Tier 3 or Tier 4 marine engines, or to repower or replace marine engines to a Tier 2 or lower marine engine standard.
17. No funds awarded under this RFP shall be used to retrofit, repower, replace, upgrade or install idle reduction technologies on eligible locomotives or marine engines that operate less than 1000 hours per year.
18. No funds awarded under this RFP shall be used to retrofit unregulated or Tier 0 locomotives with SCR, or to upgrade, repower or replace locomotives from unregulated to Tier 2 to Tier 2+ or lower. Additionally, no funds awarded under this RFP shall be used upgrade, repower or replace line-haul locomotives from Tier 2+ to Tier 3 or Tier 4.
19. No funds awarded under this RFP shall be used to install Automatic Engine Start-Stop technologies on locomotives currently certified to Tier 0+ or higher.
20. No funds awarded under this RFP shall be used for locomotive shore connection system projects that are expected to be utilized less than 1,000 hours/year.

IV. PROPOSAL AND SUBMISSION INFORMATION

A. Proposal Submission and Review

Applicants must indicate in their proposal the EPA regional office from which they are requesting funding. Applicants must request funding from the EPA regional office which covers their geographic project location. The term “project location” as used in this RFP refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized. The geographic boundaries for each EPA regional office are defined below. For long-distance fleets, the applicant should 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 award in that region. **Each proposal should have the EPA regional office from which they are requesting funding clearly listed on the Cover Page of the Project Narrative.**

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

Applicants can submit a total of three (3) proposals overall under this solicitation. Each proposal must be for a different project and must be submitted separately. An applicant cannot submit two proposals that both request funding for the same project (i.e. the same target fleet or group of fleets). If an applicant submits more than three (3) proposals to EPA, or more than one (1) proposal requests funding for the same project, the applicant will be contacted prior to EPA review of any of the proposals to determine which proposal(s) the applicant will withdraw from the competition. A single proposal may target multiple fleets, fleet types and/or diesel emission reduction solutions.

The geographic boundaries for each EPA regional office are:

- Region 1 is accepting proposals for projects located within Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.
- Region 2 is accepting proposals for projects located within New Jersey, New York, Puerto Rico and the U.S. Virgin Islands.
- Region 3 is accepting proposals for projects located within Delaware, Maryland, Virginia, Pennsylvania, West Virginia, and the District of Columbia.
- Region 4 is accepting proposals for projects located within Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee.
- Region 5 is accepting proposals for projects located within Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin.
- Region 6 is accepting proposals for projects located within Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
- Region 7 is accepting proposals for projects located within Iowa, Kansas, Missouri, and Nebraska.
- Region 8 is accepting proposals for projects located within Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.
- Region 9 is accepting proposals for projects located within California, Arizona, Nevada, Hawaii, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

- Region 10 is accepting proposals for projects located within Washington, Oregon, Idaho and Alaska.

A map showing Clean Diesel Collaboratives with EPA Regions and Contacts is available here: www.epa.gov/cleandiesel/contact-us-about-clean-diesel.

B. Requirement to Submit Through Grants.gov and Limited Exception Procedures

Applicants, except as noted below, must apply electronically through Grants.gov (www.grants.gov) under this funding opportunity based on the grants.gov instructions in this announcement and Appendix A. If an applicant does not have the technical capability to apply electronically through grants.gov because of limited or no internet access which prevents them from being able to upload the required proposal materials to Grants.gov, the applicant must contact OGDWaivers@epa.gov or the address listed below in writing (e.g., by hard copy, email) *at least 15 calendar days prior to the submission deadline under this announcement* to request approval to submit their proposal materials through an alternate method.

Mailing Address:

OGD Waivers
c/o Barbara Perkins
USEPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Ave., N. W.
Mail Code: 3903R
Washington, DC 20460

Courier Address:

OGD Waivers
c/o Barbara Perkins
Ronald Reagan Building
1300 Pennsylvania Ave., N.W.
Rm # 51267
Washington, DC 20004

In the request, the applicant must include the following information:

- Funding Opportunity Number (FON)
- Organization Name and DUNS
- Organization's Contact Information (email address and phone number)
- Explanation of how they lack the technical capability to apply electronically through Grants.gov because of 1) limited internet access or 2) no internet access which prevents them from being able to upload the required application materials through Grants.gov.

EPA will only consider alternate submission exception requests based on the two reasons stated above and will timely respond to the request -- all other requests will be denied. If an alternate submission method is approved, the applicant will receive documentation of this approval and further instructions on how to apply under this announcement. Applicants will be required to submit the documentation of approval with any initial application submitted under the alternative method.

In addition, any submittal through an alternative method must comply with all applicable requirements and deadlines in the announcement including the submission deadline and requirements regarding proposal content and page limits (although the documentation of approval of an alternate submission method will not count against any page limits).

If an exception is granted, it is valid for submissions to EPA for the remainder of the entire calendar year in which the exception was approved and can be used to justify alternative submission methods for proposal submissions made through December 31 of the calendar year in which the exception was approved (e.g., if the exception was approved on March 1, 2016, it is valid for any competitive or non-competitive proposal submission to EPA through December 31, 2016). Applicants need only request an exception once in a calendar year and all exceptions will expire on December 31 of that calendar year. Applicants must request a new exception from required electronic submission through grants.gov for submissions for any succeeding calendar year. For example, if there is a competitive opportunity issued on December 1, 2016 with a submission deadline of January 15, 2017, the applicant would need a new exception to submit through alternative methods beginning January 1, 2017.

Please note that the process described in this section is only for requesting alternate submission methods. All other inquiries about this announcement must be directed to the Agency Contact listed in Section VII of the announcement. Queries or requests submitted to the email address identified above for any reason other than to request an alternate submission method will not be acknowledged or answered.

C. Grants.gov Application Submission Instructions (see Appendix A)

Your organization's authorized official representative (AOR) must submit your complete proposal electronically to EPA through Grants.gov (www.grants.gov) no later than **Tuesday, April 26, 2016 at 4:00 p.m. Eastern Time (ET)**.

The electronic submission of your application must be made by an official representative of your institution who is registered with Grants.gov and is authorized to sign applications for Federal assistance. For more information on the registration requirements that must be completed in order to submit an application through grants.gov, go to www.grants.gov and click on "Applicants" on the top of the page and then go to the "Get Registered" link on the page. If your organization is not currently registered with Grants.gov, please encourage your office to designate an Authorized Organization Representative (AOR) and ask that individual to begin the registration process as soon as possible. Please note that the registration process also requires that your organization have a DUNS number and a current registration with the System for Award Management (www.SAM.gov) and the process of obtaining both could take a month or more. 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 submission deadline. Registration on Grants.gov, SAM.gov, and DUNS number assignment is FREE.

Full Grants.gov submission instructions are located in Appendix A of this announcement.

D. Content of Proposal Submission

The proposal package *must* include all of the following materials:

1. Grant Application Forms:

- a. **Standard Form (SF) 424, Application for Federal Assistance.** Complete the form (available at: www.epa.gov/grants/epa-grantee-forms). There are no attachments. Please be sure to include the Applicant organization fax number and email address in Block 5 of the Standard Form 424.

Please note that the organizational Dun and Bradstreet (D&B) Data Universal Number System (DUNS) number must be included on the SF-424. Organizations may obtain a DUNS number at no cost by calling the toll-free DUNS number request line at 1-866-705-5711.

- b. **Standard Form (SF) 424A, Budget Information.** Complete the form (available at: www.epa.gov/grants/epa-grantee-forms). There are no attachments. The total amount of federal funding requested for the project period should be shown on line 5(e) and on line 6(k) of SF-424A, the amount of indirect costs should be entered on line 6(j). The indirect cost rate (i.e., a percentage), the base (e.g., personnel costs and fringe benefits), and the amount should also be indicated on line 22.

2. **Project Narrative:** The Project Narrative must substantially comply with the specific instructions, format and content as defined in **Appendix B**. The Project Narrative includes the following components:

- a. Cover Page (as defined in Appendix B)
- b. Narrative Work Plan (Sections 1-9 as defined in Appendix B)

The Project Narrative, including the Cover Page (which is recommended not to exceed one page) shall not exceed eleven (11) single-spaced pages in length. Pages refer to one-side of a single-spaced typed page. Font size should be no smaller than 10 and the proposal must be submitted on 8 ½" x 11" paper. Pages in excess of the 11-page project narrative limit will not be considered. Supporting materials, such as resumes, letters of support and/or commitment, and fleet description information can be submitted as attachments and are not included in the 11-page limit.

A sample format for the Project Narrative may be downloaded at: www.epa.gov/file/2016-project-narrative-sample.

3. **Applicant Fleet Description:** This information does not count toward the 11-page limit. The purpose of the Applicant Fleet Description is to describe in detail the specific vehicles and engines targeted for emission reductions as well as the diesel emission 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 on the funding restrictions identified in Section III.D of this RFP and for evaluation purposes as described below.** Applicants must describe, to the extent possible, the fleet(s) targeted for the

proposed project, including: target fleet type (e.g., school bus, ports and airports, construction, delivery truck, transit bus, locomotive, refuse hauler, utility vehicle, long haul truck, agriculture, mining, marine, stationary, city/county vehicle, emergency vehicle, other), number of vehicles, vehicle class or equipment type, serial/VIN# of engine/vehicle, engine make, engine model, engine model year, engine family name, horsepower, displacement, current tier level or emission standards, fuel type, amount of fuel used, annual miles travelled or annual usage rate, and annual idling hours. Applicants must describe, to the extent possible, the diesel emission reduction solution(s) applied to each targeted vehicle/engine, including (where applicable): year of retrofit action, new technology type, new technology make, new technology model, new engine family name, new engine model year, new horsepower, new displacement, new tier level or emission standards, new fuel type, annual idling hours reduced, and technology unit and installation costs. This information may be presented in a table format. Proposals for repowers should include the pre- and post- project standard emission levels of the engines to be repowered, in order to ensure that the repower will result in a net emissions reduction.

A sample format for the Applicant Fleet Description may be downloaded at: www.epa.gov/file/2016-applicant-fleet-description-sample.

Applicants will be scored under Section V, 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 emission reductions from the project and should be consistent with the information presented in Sections 1 and 7 of the Project Narrative (see Appendix C for additional information).

4. **Cost-Share Commitment Letters:** If applicable, project partners who are providing in-kind or monetary assistance must demonstrate their specific commitment to meet the proposed cost-share. This information does not count towards the 11-page limit.
5. **Letters of Support/Partnership:** If applicable, 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 more effectively perform the project. This information does not count towards the 11-page limit.
6. **Mandated Measures Justification Supporting Information:** If applicable, the proposal must include a clear and concise justification in Section 1 of the Project Narrative, for why/how the emission reductions proposed for funding are not subject to the Restriction for Mandated Measures under this RFP. **Applicants must provide sufficient detail and information to support the justification, including maintenance schedules and history, if applicable.** Please see **Section III.D.1** and **Appendix D** for more information. This supporting information should be provided as an attachment and does not count towards the 11-page limit.
7. **Optional Attachments:** These are not included in the 11-page limit.
 - a. **Resumes:** Provide resumes or curriculum vitae for all principal investigators and any other key personnel.

Please refer to the Proposal Submission Checklist in Appendix F to ensure that all required information is included in your proposal package.

E. Submission Dates and Time

The closing date and time for submission of proposals is **Tuesday, April 26, 2016 at 4:00 p.m. Eastern Time (ET)**. Proposals submitted after the closing date and time will not be considered for funding.

F. Pre-Proposal Assistance and Communications

In accordance with EPA's Assistance Agreement Competition Policy (EPA Order 5700.5A1), EPA staff will not meet with individual applicants to discuss draft proposals, provide informal comments on draft proposals, or provide advice to applicants on how to respond to ranking criteria. Applicants are responsible for the contents of their applications/proposals. However, consistent with the provisions in the announcement, EPA will respond to questions from individual applicants regarding threshold eligibility criteria, administrative issues related to the submission of the proposal, and requests for clarification about any of the language or provisions in the announcement.

All applicants are encouraged to review the Frequently Asked Questions (FAQ) document posted at www.epa.gov/sites/production/files/2016-02/documents/fy16-dera-faq.pdf for further clarification of this Request for Proposals.

Applicants may email written questions to: cleandiesel@epa.gov. Please type "RFP Question" in the subject line of your email. All questions and answers will be posted in the FAQ document.

All questions submitted via email by 4:00 p.m. ET each Friday during the RFP open period will be answered and posted in the FAQ document the following week. The deadline for submitting questions via email is Friday, April 15, 2016 at 4:00 p.m. ET. The estimated final posting of the FAQ document will be Wednesday, April 20, 2016 at 4:00 p.m. ET.

In addition, EPA will host two Information Sessions regarding this Request for Proposals via teleconference/webinar, based on the schedule below. EPA will attempt to answer any appropriate questions in these public forums. Information for the webinars can be found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfp.

Sessions

Tuesday, March 8, 2016 at 2:00 p.m. (ET)

Thursday, March 10, 2016 at 2:00 p.m. (ET)

Questions and answers from these webinars will also be posted in the FAQ document.

If necessary, EPA may clarify threshold eligibility issues with applicants prior to making an eligibility determination.

G. Contracts and Subawards:

1. Can funding be used for the applicant to make subawards, acquire contract services, or fund partnerships?

EPA awards funds to one eligible applicant as the recipient even if other eligible applicants are named as partners or co-applicants or members of a coalition or consortium. The recipient is accountable to EPA for the proper expenditure of funds.

Funding may be used to provide subgrants or subawards of financial assistance, which includes using subawards or subgrants to fund partnerships, provided the recipient complies with applicable requirements for subawards or subgrants including those contained in 2 CFR Part 200. Applicants must compete contracts for services and products, including consultant contracts, and conduct cost and price analyses, to the extent required by the procurement provisions of the regulations at 2 CFR Part 200. Applicants are not required to identify subrecipients and/or contractors (including consultants) in their proposal. However, if they do, the fact that an applicant selected for award has named a specific subrecipient, contractor, or consultant in the proposal EPA selects for funding does not relieve the applicant of its obligations to comply with subaward and/or competitive procurement requirements as appropriate. Please note that applicants may not award sole source contracts to consulting, engineering or other firms assisting applicants with the proposal solely based on the firm's role in preparing the proposal.

Successful applicants cannot use subawards to avoid requirements in EPA grant regulations for competitive procurement by using these instruments to acquire commercial services or products from for-profit organizations to carry out its assistance agreement. The nature of the transaction between the recipient and the subawardee or subgrantee must be consistent with the standards for distinguishing between vendor transactions and subrecipient assistance found at 2 CFR 200.330, and the definitions of subaward at 2 CFR 200.92 and subrecipient at 2 CFR 200.93. EPA will not be a party to these transactions. Applicants acquiring commercial goods or services must comply with the competitive procurement standards in 2 CFR 200.317-326 and cannot use a subaward as the funding mechanism.

2. How will an applicant's proposed subawardees/subgrantees and contractors be considered during the evaluation process described in Section V of the announcement?

Section V of this RFP describes the evaluation criteria and evaluation process that will be used by EPA to make selections under this RFP. During this evaluation, except for those criteria that relate to the applicant's own qualifications, past performance, and reporting history, the review panel will consider, as appropriate and relevant, the qualifications, expertise, and experience of:

- a.** an applicant's named subrecipients identified in the proposal if the applicant demonstrates in the proposal that if it receives an award that the subaward will be properly awarded consistent with the applicable regulations in 2 CFR Part 200. For example, applicants must not use subawards to obtain commercial services or products from for profit firms or individual consultants.
- b.** an applicant's named contractor(s), including consultants, identified in the proposal if the applicant demonstrates in its proposal that the contractor(s) was selected in compliance with the competitive Procurement Standards in 2 CFR 00.317-326. For example, an applicant

must demonstrate that it selected the contractor(s) competitively or that a proper non-competitive sole-source award consistent with the regulations will be made to the contractor(s), that efforts were made to provide small and disadvantaged businesses with opportunities to compete, and that some form of cost or price analysis was conducted. EPA may not accept sole source justifications for contracts for services or products that are otherwise readily available in the commercial marketplace.

EPA will not consider the qualifications, experience, and expertise of named subrecipients and/or named contractor(s) during the proposal evaluation process unless the applicant complies with these requirements.

H. Additional Provisions for Applicants Incorporated Into the Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation, including but not limited to those related to confidential business information, contracts and subawards under grants, and proposal assistance and communications, can be found at www.epa.gov/grants/epa-solicitation-clauses. These, and the other provisions that can be found at the website link, are important, and applicants must review them when preparing proposals for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain the provisions.

V. PROPOSAL REVIEW INFORMATION

Only eligible entities whose proposals meet the threshold criteria in Section III of this RFP will be evaluated according to the criteria set forth below. **Applicants should explicitly address these criteria as part of their proposal package submittal, following the content requirements set forth in Appendix B.** Each proposal will be rated using a point system. Proposals will be evaluated based on a total of 145 points possible.

A. Evaluation Criteria

Criteria	Points
Project Narrative	
<p>1. <u>Project Summary and Approach:</u> Under this criterion, proposals will be evaluated based on the extent and quality of the applicant’s project summary and overall approach. Specifically:</p> <ul style="list-style-type: none"> A. (5 points) Vehicles and Technologies; B. (5 points) Roles and Responsibilities; C. (5 points) Timeline and Milestones; D. (5 points) Whether the proposal includes a well-conceived strategy for achieving the anticipated results associated with the project; and E. (5 points) Whether the proposal sets forth a reasonable time schedule for the execution of the tasks associated with the project and for achieving the project goals and objectives by project end. 	<p>25</p>

<p>2. <u>Project Location:</u> Under this criterion, proposals will be evaluated based on the project location. Specifically:</p> <p>A. (5 points) Whether the proposal includes a detailed description of the primary areas where the affected vehicle/engine operate, or the primary area where the emissions benefits of the project will be realized.</p> <p>B. (15 points) Projects located in an Ozone or PM_{2.5} Nonattainment or Maintenance area, as described in Section I.B.3.a.1.</p> <p>C. (10 points) Projects located in an area where all or part of the population is exposed to diesel PM greater than 2.0 µg/m³, as described in Section I.B.3.a.2.</p> <p>The term “project location” as used in this RFP refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized.</p>	<p>30</p>
<p>3. <u>Project Sector:</u> Under this criterion, proposals will be evaluated based on the project sector.” Specifically:</p> <p>A. (5 points) Whether the proposal includes a detailed description of the economic sector served by the project.</p> <p>B. (10 points) Whether the vehicles/engines/equipment targeted for diesel emission reductions are located at, or service, goods movement facilities such as: ports, rail yards, terminals, or distribution centers, as described in Section I.B.3.b.</p>	<p>15</p>
<p>4. <u>Benefits to the Community:</u> Under this criterion, applicants will be evaluated based on the quality and extent to which their proposal demonstrates how the proposed project will address the needs and concerns of local communities, including any communities or populations that have faced or are facing environmental justice concerns (as defined in Section I.B.3.c of the RFP), and/or other interested parties, groups, or populations that are affected, or have been affected, by the environmental and/or other issues that the project is intended to address.</p>	<p>5</p>
<p>5. <u>Community Engagement and Partnerships:</u> Under this criterion, proposals will be evaluated based on the extent and quality of the applicant’s efforts and plans for engaging local communities with respect to the design and performance of the project and obtaining support from project partners to more effectively perform the project, as described I Section I.B.3.d of the RFP.</p>	<p>5</p>
<p>6. <u>Project Sustainability:</u> Under this criterion, applicants will be evaluated based on the extent and quality to which the applicant can demonstrate its ability to promote and continue efforts to reduce emissions after EPA funding for this project has ended, as described in Section I.B.3.e of the RFP.</p>	<p>5</p>

<p>7. <u>Environmental Results – Outputs, Outcomes and Performance</u> <u>Measures:</u> Under this criterion, applicants will be evaluated based on:</p> <p>A. (15 points) the extent and quality to which the applicant identifies and quantifies the expected project outputs and outcomes, including those identified in Section I.C of the RFP.</p> <p>B. (5 points) the effectiveness of the applicant’s plan for tracking and measuring its progress toward achieving the expected project outputs and outcomes, including the performance measures proposed by the applicant and how they will be used to help track and measure the Applicants progress towards achieving the expected outputs and outcomes.</p>	<p>20</p>
<p>8. <u>Programmatic Capability and Past Performance:</u> Under this criterion, applicants will be evaluated based on their ability to successfully complete and manage the proposed project taking into account their:</p> <p>A. (5 points) past performance in successfully completing and managing the assistance agreements identified in the Project Narrative.</p> <p>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;</p> <p>C. (5 points) organizational experience and plan for timely and successfully achieving the objectives of the proposed project; and</p> <p>D. (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.</p> <p>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 you do not have any relevant or available past performance or reporting information, please indicate this in the proposal and you 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 you do not provide any response for these items, you may receive a score of 0 for these factors.</p>	<p>20</p>
<p>9. <u>Budget:</u> Under this criterion, the Agency will evaluate the proposed project for the following items:</p> <p>A. (5 points) Applicants will be evaluated based on their approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner.</p>	<p>15</p>

<p>B. (5 points) Whether costs are reasonable to accomplish the proposed goals, objectives, and measurable environmental outcomes; and</p> <p>C. (5 points) Whether the proposed budget provides a detailed breakout of the approximate funding used for each major activity.</p> <p>An applicant’s budget 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). 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.</p>	
<p>10. <u>Applicant Fleet Description:</u> Under this criterion, applicants will be evaluated 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 of the RFP.</p>	<p>5</p>

B. Review and Selection Process

Assistance agreements funded under this announcement will be awarded and managed by each of EPA’s ten regional offices. Proposals will be reviewed by regional review panels.

Applicants must submit their proposals electronically through grants.gov, and clearly indicate on the Cover Page of the Project Narrative the appropriate EPA Region from which funding is being requested based on the geographic project location. See Section IV.A for information on determining project location.

Proposals will first be evaluated against the threshold factors listed in Section III.C of this RFP. Only those proposals which meet all of the threshold factors will be evaluated using the evaluation criteria listed above. Each proposal will be given a numerical score and will be rank-ordered by the regional review panels as follows: EPA Regions 1-8 will each separately review and select proposals for projects located within their Region; EPA Regions 9 and 10 will jointly review proposals for projects that take place in Regions 9 and/or 10, but will develop separate ranking lists for the Region 9 and 10 proposals, and selections will be made separately by Regions 9 and 10 based on these separate lists.

Preliminary funding recommendations will be provided to the EPA regional Approving Officials based on these reviews and rankings.

C. Other Factors

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

Once final decisions have been made, a funding recommendation will be developed and forwarded to the appropriate EPA Award Official for approval.

VI. AWARD ADMINISTRATION INFORMATION

A. Award Notices

Following evaluation of proposals, all applicants will be notified regarding their status.

- 1. Successful Applicants:** EPA anticipates notification to successful applicants will be made via electronic or postal mail by Wednesday, June 1, 2016. The notification will be sent to the original signer of the proposal or the project contact listed in the proposal. This notification, which informs the applicant that its proposal 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 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 or postal 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.

- 2. Unsuccessful Applicants:** EPA anticipates notification to unsuccessful applicant(s) will be made via electronic or postal mail by Wednesday, June 1, 2016. The notification will be sent to the original signer of the Standard Form 424, Application for Federal Assistance.

B. Administrative and National Policy Requirements

A listing and description of general EPA Regulations applicable to the award of assistance agreements may be viewed at: www.epa.gov/grants/policy-regulations-and-guidance-epa-grants.

Executive Order 12372, Intergovernmental Review of Federal Programs, may be applicable to awards resulting from this announcement. Applicants selected for funding may be required to provide a copy of their application to their State Point of Contact (SPOC) for review, pursuant to Executive Order 12372, Intergovernmental Review of Federal Programs. This review is not required with the initial proposal submission, and not all states require such a review. A listing of State Point of Contacts (SPOC) may be viewed at: www.whitehouse.gov/omb/grants_spoc.

For the purpose of responding to this RFP, applicants may choose to not respond to question #19 on the SF 424 form; EPA will provide additional guidance on the intergovernmental review process to those applicants selected for funding.

C. Reporting Requirement

Quarterly progress reports and a detailed final report will be required. Quarterly reports summarizing technical progress, planned activities for the next quarter and a summary of expenditures are required. The final report shall be submitted to EPA within 90 calendar days of the completion of the period of performance. The final report must include: summary of the project or activity, advances achieved and costs of the project or activity. In addition, the final report shall discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational or technical obstacles to implementing a similar project elsewhere. The schedule for submission of quarterly reports will be established by EPA, after the grants are awarded. Award recipients may be provided with additional information and guidance on reporting performance measures and project progress after award.

D. 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) located on the web at: www.epa.gov/grants/dispute-resolution-procedures. Copies of these procedures may also be requested by contacting Faye Swift at swift.faye@epa.gov.

E. Additional Provisions for Applicants Incorporated Into the Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation, including but not limited to those related to DUNS, SAM, copyrights, disputes, and administrative capability, can be found at: www.epa.gov/grants/epa-solicitation-clauses. These, and the other provisions that can be found at the website link, are important, and applicants must review them when preparing proposals for this solicitation. If you are unable to access these provisions electronically at the website above, please communicate with the EPA contact listed in this solicitation to obtain the provisions.

VII. AGENCY CONTACTS

Faye Swift
DERA Grants and Policy Team Leader
USEPA, Office of Transportation and Air Quality
1200 Pennsylvania Ave., NW (6406A)
Washington, DC 20460
Phone: (202) 343-9147
Email: swift.faye@epa.gov

In accordance with EPA's Assistance Agreement Competition Policy (EPA Order 5700.5A1), EPA staff will not meet with individual applicants to discuss draft proposals, provide informal comments on draft proposals, or provide advice to applicants on how to respond to ranking criteria.

EPA will respond to questions from individual applicants regarding threshold eligibility criteria, administrative issues related to the submission of the proposal, and requests for clarification about any of the language or provisions in the announcement through a "Frequently Asked Questions" document. Applicants may email written questions to: cleandiesel@epa.gov. Please type "RFP

Question” in the subject line of your email. All questions and answers will be posted in the FAQ document at www.epa.gov/sites/production/files/2016-02/documents/fy16-dera-faq.pdf.

Please see Section IV.F for additional information on pre-proposal assistance and communications.

APPENDIX A - Grants.gov Proposal Submission Instructions

The electronic submission of your application must be made by an official representative of your institution who is registered with Grants.gov and is authorized to sign applications for Federal assistance. For more information on the registration requirements that must be completed in order to submit an application through Grants.gov, go to www.grants.gov and click on “Applicants” on the top of the page and then go to the “Get Registered” link on the page. If your organization is not currently registered with Grants.gov, please encourage your office to designate an Authorized Organization Representative (AOR) and ask that individual to begin the registration process as soon as possible. Please note that the registration process also requires that your organization have a DUNS number and a current registration with the System for Award Management (www.SAM.gov) and the process of obtaining both could take a month or more. 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 submission deadline. Registration on Grants.gov, SAM.gov, and DUNS number assignment is FREE.

Applicants need to ensure that the AOR who submits the application through Grants.gov and whose DUNS number is listed on the application is an AOR for the applicant listed on the application. Additionally, the DUNS number listed on the application must be registered to the applicant organization’s SAM account. If not, the application may be deemed ineligible.

To begin the application process under this grant announcement, go to Grants.gov and click on “Applicants” on the top of the page and then “Apply for Grants” from the dropdown menu and then follow the instructions accordingly. Please note: To apply through Grants.gov, you must use Adobe Reader software and download the compatible Adobe Reader version. For more information about Adobe Reader, to verify compatibility, or to download the free software, please visit Adobe Software Compatibility Information on Grants.gov.

You may also be able to access the application package for this announcement by searching for the opportunity on Grants.gov. Go to Grants.gov and then click on “Search Grants” at the top of the page and enter the Funding Opportunity Number, EPA-OAR-OTAQ-16-02, or the CFDA number, CFDA 66.039, in the appropriate field and click the Search button. Alternatively, you may be able to access the application package by clicking on the Package button at the top right of the synopsis page for the announcement on Grants.gov. To find the synopsis page, go to Grants.gov and click “Browse Agencies” in the middle of the page and then go to “Environmental Protection Agency” to find the EPA funding opportunities.

Application Submission Deadline: Your organization’s AOR must submit your complete application package electronically to EPA through Grants.gov no later than **Tuesday, April 26, 2016 at 4:00 p.m. ET**. Please allow for enough time to successfully submit your application process and allow for unexpected errors that may require you to resubmit.

Please submit *all* of the application materials described below using the grants.gov application package that you downloaded using the instructions above. For additional instructions on completing and submitting the electronic application package, click on the “Show Instructions” tab that is accessible within the application package itself.

Application Materials

The following forms and documents are required under this announcement:

Mandatory Documents:

- Application for Federal Assistance (SF-424)
- Budget Information for Non-Construction Programs (SF-424A)
- Project Narrative (Project Narrative Attachment Form)-prepared as described in Section IV.D of the RFP

Optional Documents:

- Other Attachments (Other Attachments Form) – as described in Section IV.D of the RFP.

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

If you have not received a confirmation of receipt from EPA (not from grants.gov) within 30 days of the application deadline, please contact Faye Swift, at (202) 343-9147. Failure to do so may result in your application not being reviewed.

Technical Issues with Submission

1. Once the application package has been completed, the “Submit” button should be enabled. If the “Submit” button is not active, please call [Grants.gov](https://www.grants.gov) for assistance at 1-800-518-4726. 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](https://www.grants.gov) representative by calling 606-545-5035. Applicants should save the completed application package with two different file names before providing it to the AOR to avoid having to re-create the package should submission problems be experienced or a revised application needs to be submitted.

2. Submitting the application. The application package must be transferred to [Grants.gov](https://www.grants.gov) by an AOR. The AOR should close all other software before attempting to submit the application package. Click the “submit” button of the application package. Your Internet browser will launch and a sign-in page will appear. **Note: Minor problems are not uncommon with transfers to [Grants.gov](https://www.grants.gov). It is essential to allow sufficient time to ensure that your application is submitted to [Grants.gov](https://www.grants.gov) BEFORE the due date identified in Section IV of the solicitation.** The [Grants.gov](https://www.grants.gov) support desk operates 24 hours a day, seven days a week, except Federal Holidays.

A successful transfer will end with an on-screen acknowledgement. For documentation purposes, print or screen capture this acknowledgement. If a submission problem occurs, reboot the computer – turning the power off may be necessary – and re-attempt the submission.

Note: [Grants.gov](https://www.grants.gov) issues a “case number” upon a request for assistance.

3. Transmission Difficulties. If transmission difficulties that result in a late transmission, no transmission, or rejection of the transmitted application are experienced, and following the above instructions do not resolve the problem so that the application is submitted to [Grants.gov](https://www.grants.gov) by the deadline date and time, follow the guidance below. The Agency will make a decision concerning acceptance of each late submission on a case-by-case basis. All emails, as described below, are

to be sent to swift.faye@epa.gov, with the FON in the subject line. If you are unable to email, contact Faye Swift at (202) 343-9147. Be aware that EPA will only consider accepting applications that were unable to transmit due to [Grants.gov](https://www.grants.gov) or relevant [www.SAM.gov](https://www.sam.gov) system issues or for unforeseen exigent circumstances, such as extreme weather interfering with internet access. Failure of an applicant to submit timely because they did not properly or timely register in SAM.gov or [Grants.gov](https://www.grants.gov) is not an acceptable reason to justify acceptance of a late submittal.

a. If you are experiencing problems resulting in an inability to upload the application to [Grants.gov](https://www.grants.gov), it is essential to call [Grants.gov](https://www.grants.gov) for assistance at 1-800-518-4726 before the application deadline. 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](https://www.grants.gov) representative by calling 606-545-5035. Be *sure* to obtain a case number from [Grants.gov](https://www.grants.gov). If the problems stem from unforeseen exigent circumstances unrelated to [Grants.gov](https://www.grants.gov), such as extreme weather interfering with internet access, contact Faye Swift at (202) 343-9147.

b. Unsuccessful transfer of the application package: If a successful transfer of the application cannot be accomplished even with assistance from [Grants.gov](https://www.grants.gov) due to electronic submission system issues or unforeseen exigent circumstances, send an email message to swift.faye@epa.gov prior to the application deadline. The email message must document the problem and include the [Grants.gov](https://www.grants.gov) case number as well as the entire application in PDF format as an attachment.

c. [Grants.gov](https://www.grants.gov) rejection of the application package: If a notification is received from [Grants.gov](https://www.grants.gov) stating that the application has been rejected for reasons other than late submittal promptly send an email to swift.faye@epa.gov with the FON in the subject line within one business day of the closing date of this solicitation. The email should include any materials provided by [Grants.gov](https://www.grants.gov) and attach the entire application in PDF format.

APPENDIX B -Project Narrative Instructions, Format, and Content

Instructions: The Project Narrative must substantially comply with the specific instructions, format and content defined below. It must also address the evaluation criteria in Section V of the RFP.

The Project Narrative, including the Cover Page (which is recommended not to exceed one page), must not exceed a maximum of 11 single-spaced typewritten pages. Pages in excess of the 11-page limit will not be considered. Supporting materials, such as resumes, letters of support and/or commitment, and the Applicant Fleet Description information can be submitted as attachments and are not included in the 11-page limit.

A template is available for use at: www.epa.gov/file/2016-project-narrative-sample. Applicants are not required to use the template but may choose to do so.

Cover Page: The cover page must include the following information:

- EPA Region: Specify the EPA Regional Office from which you are requesting funding (Regions 1 – 10), where your project will solely or primarily occur. See Sections IV.A of the RFP.
- Project Title
- Applicant Information
 - Applicant (Organization) Name
 - Address (Street, City, State, Zip)
 - Office Phone and Fax Numbers
 - Contact Name, Email address and Website (if applicable)
 - DUNS number
- Eligible Entity
 - Using the criteria outlined under Section III.A of this RFP, explain how you are an eligible entity.
- Total Project Cost
 - Specify total cost of the project
 - Identify amount of funding requested from EPA
 - Identify amount of mandatory match if applicable (including in-kind resources). See Sections I.B.2 and III.B.1.
 - Identify amount of voluntary cost-share (including in-kind resources), if any. Please refer to Section III.B.2.
- Target Fleet
 - Specify target fleet type(s) from the following list
 - Agriculture
 - City/County vehicle
 - Construction
 - Delivery Truck
 - Emergency vehicle
 - Long haul
 - Marine
 - Ports and airports
 - Rail
 - Refuse hauler
 - School bus
 - Short haul
 - Stationary
 - Transit bus
 - Utility vehicle
 - Mining
 - Other
 - Additionally, specify the total number of engines, vehicles, and/or pieces of equipment affected by the project.

- Technology
 - Specify the technologies that will be used in the grant proposal from the following list, as referenced in Section I.B.2.
 - Diesel Oxidation Catalyst (includes all oxidation catalyst combinations with closed crankcase ventilation and/or biodiesel blends)
 - Diesel Particulate Filter (includes all particulate matter filter combinations with closed crankcase ventilation and/or biodiesel blends)
 - Selective Catalytic Reduction
 - Other Verified Exhaust Control or After-treatment Device
 - Engine Upgrade
 - Clean Fuel Use
 - Fuel Operated Heater
 - Auxiliary Power Unit
 - Electrified Parking Spaces
 - Marine Shore Power
 - Other Verified Idle Reduction Technology
 - Aerodynamic Technology
 - Low Rolling Resistance Tires
 - Engine Repower
 - Vehicle Replacement
- Short Project Description
 - Briefly describe your project (1-2 sentences), especially noting the number of vehicles for each type of fleet, and the technology used. Example description: Retrofit 40 school buses with DPFs. In addition, repower 10 nonroad construction vehicles, and install DPFs and APUs on 20 Class 8 long-haul trucks.

Narrative Work Plan: Applicants must ensure that the Narrative Work Plan addresses the evaluation criteria in Section V.A of this announcement by using the section numbers and headings and subsection numbers and headings below which correspond with the evaluation criteria in Section V.A of this RFP.

Section 1. Project Summary and Approach

This section of the work plan should contain a detailed project description, including the following information:

A. VEHICLES AND TECHNOLOGIES:

- A description of the eligibility, number, types and typical use, and ownership of vehicles, engines and/or equipment targeted for emission reductions.
- A discussion of how the applicant has weighed the available/eligible technology options for the target fleet and has arrived at the chosen diesel emission reduction solution(s).
- A description of all verified and/or certified technologies to be used or funded by the applicant.
- Proposals for repowers should include the pre- and post- project standard emission levels of the engines to be repowered, in order to ensure that the repower will result in a net emissions reduction.
- A discussion of whom or what organization(s) will retain ownership of any vehicles, engines and/or equipment purchased with funding from this project.

- Proposals which include repowers and replacements must include:
 - a detailed discussion of the fleet owner’s normal attrition schedule and must demonstrate that the proposed emission reductions are not a result of vehicle/equipment replacements or repowers that would have occurred through normal attrition/fleet turnover within three years of the project start date.
 - the applicant’s plans for engine/vehicle/equipment scrappage
- Proposals which include locomotives and/or marine engines and/or stationary engines must include a clear and concise justification for why/how the proposed emission reductions are not subject to the Restriction for Mandated Measures under this RFP, as described in Section III.D.1 and Appendix D.

B. **ROLES AND RESPONSIBILITIES:** A discussion of the roles and responsibilities of the Applicant organization and any other project partners, contractors, or subgrantees.

C. **TIMELINE AND MILESTONES:** A detailed timeline for the project including milestones for specific tasks, such as bidding, procurement, installation and reports. Applicants should schedule time for Final Report preparation into the project timeline.

Section 2. Project Location

A. **PROJECT LOCATION:** This section of the work plan should include a detailed discussion of the project location. The term “project location” as used in this RFP refers to the primary area where the affected vehicles/engines operate, or the primary area where the emissions benefits of the project will be realized. If a single proposal includes vehicles operating in more than one county, this section of the work plan should indicate where each vehicle operates and the amount (%) of time spent in each county.

B. **NONATTAINMENT AREAS:** Priority will be given to projects located in areas of poor air quality as described in Section I.B.3.a.1 of the RFP. This section of the workplan should indicate whether all or a portion of the project is located in one of these areas.

C. **AIR TOXICS ASSESSMENT AREAS:** Priority will be given to projects located in areas of poor air quality as described in Section I.B.3.a.2 of the RFP. This section of the workplan should indicate whether all or a portion of the project is located in one of these areas.

A list of priority counties that will receive points under Section V, Criterion #2.B and C of this RFP can be found at: www.epa.gov/sites/production/files/2016-01/documents/fy16-county-area-list.pdf.

Section 3. Project Sector

A. **PROJECT SECTOR:** This section of the work plan should include a detailed discussion of the economic sector served by the project (e.g. agriculture, school bus, construction, ports and airports, etc.).

B. **GOODS MOVEMENT:** Priority will be given to proposals which demonstrate that the vehicles/engines/equipment targeted for emission reductions are located at, or service, goods movement facilities such as: ports, rail yards, terminals, or distribution centers, as described in

Section I.B.3.b of the RFP. If a single proposal includes vehicles operating in more than one type of facility or sector, this section of the work plan should indicate where each vehicle will be operating and the amount (%) of time spent in each.

Section 4. Benefits to the Community

This section of the work plan should include a detailed discussion of how the proposed project will address the needs and concerns of local communities, including any communities or populations that have faced or are facing environmental justice concerns (as defined in Section I.B.3.c of the RFP), and/or other interested parties, groups, or populations that are, or have been, affected by the environmental and/or other issues that the project is intended to address. The term “environmental justice concerns,” as used in this solicitation, generally relate to issues that have resulted in some communities and/or populations being more adversely, disproportionately and/or historically impacted by environmental issues and problems than other communities because of geography, poverty, income levels and similar types of factors.

The extent that a project will maximize public health benefits depends on both the population, community or group that will experience improvements in air quality due to the project, and the amount of emission reductions that will take place. Proposals should therefore describe both the population, community or group that will be affected by the project and how they will directly benefit from the emission reductions that will result from the project.

Note: Factors potentially indicating disproportionate impacts include: differential proximity and exposure to environmental hazards; greater susceptibility to adverse effects from environmental hazards (due to genetic predisposition, age, chronic medical conditions, lack of health care access, or poor nutrition); unique environmental exposures because of practices linked to cultural background or socioeconomic status (*e.g.*, subsistence fishing or farming); cumulative effects from multiple stressors; reduced ability to effectively participate in decision-making processes (due to language barriers, inability to access traditional communication channels, or limited capacity to access technical and legal resources); and degraded physical infrastructure, such as poor housing, poorly maintained public buildings (*e.g.*, schools), or lack of access to transportation.

Section 5. Community Engagement and Partnerships

This section of the workplan should include a detailed discussion of applicant’s efforts and plans for engaging local communities with respect to the design and performance of the project and obtaining support from project partners to more effectively perform the project, as described in Section I.B.3.d of the RFP. Applicants should discuss their approach for incorporating community input throughout the design and performance of the project, and/or whether their design of the proposed project involved and incorporated community input. Community engagement and partnership efforts should include various organizations representing a broad spectrum of the community; examples include grassroots, neighborhood, school, faith-based, city council, business, local government, and other organizations. Recent involvement of project partners and community members working together on projects should be highlighted. Proposals with letters of commitment that demonstrate strong, long-term involvement throughout the project from a variety of project partners may also be evaluated more favorably than others.

Section 6. Project Sustainability

This section of the workplan should include a detailed discussion of the Applicant’s ability to promote and continue efforts to reduce emissions after EPA funding for this project has ended, as described in Section I.B.3.e of the RFP. This could include, but is not limited to, the project’s inclusion in a broader-based environmental or air quality plan, the implementation of idle-reduction policies, the implementation of contract specifications requiring the use of cleaner vehicles and equipment, or a documented commitment to continue to identify and address air quality issues in the affected community.

Section 7. Environmental Results—Outputs, Outcomes and Performance Measures

A. **OUTPUTS AND OUTCOMES:** This section of the work plan must include a discussion of the outputs and outcomes of the project as defined in Section I.C.2 and 3 of the RFP. Specific outputs and outcomes should be included.

Applicants should follow the instructions in **Appendix C** of this announcement for calculating emission reductions. In addition to a narrative discussion of the outputs and outcomes, it is suggested that the applicant fill out and include the following table, or something similar, in this section of the work plan.

Anticipated Outputs and Outcomes		
Activities	Outputs	Outcomes

Example Outputs and Outcome Table

<i>Anticipated Outputs and Outcomes</i>		
<i>Activities</i>	<i>Outputs</i>	<i>Outcomes</i>
<i>Retrofit 100 school buses</i>	<i># of technology installed = 100 DPFs</i>	<i>Lifetime Emission Reductions = 11.9 tons PM</i>

B. **PERFORMANCE MEASURES:** In this section of the workplan applicants must describe what performance measurements, timeline of milestones, and/or other means will be used to track, measure and report progress towards achieving the expected outputs and outcomes and how the results of the project will be evaluated, as described in Section I.C.4 of the RFP.

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

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

Section 8. Programmatic Capability and Past Performance

- A. **PAST PERFORMANCE:** This section of the work plan must include a list of federally funded assistance agreements similar in size, scope and relevance to the proposed project that your organization performed within the last three years. Assistance agreements include federal grants and cooperative agreements but not federal contracts. Please reference no more than three assistance agreements. EPA agreements are preferred. For each agreement listed, include:
- Project Title
 - Assistance Agreement Number
 - Funding Agency and CFDA Number

This section of the workplan should include a discussion of whether, and how, the applicant was able to successfully complete and manage the listed agreements.

- B. **REPORTING REQUIREMENTS:** This section of the workplan should include a discussion of the applicant's history of meeting the reporting requirements under the agreements listed above, including submitting acceptable final technical reports and how the applicant documented and/or reported on whether it was making progress towards achieving the expected results (e.g., outputs and outcomes) under those agreements. If the applicant was not making progress, please indicate whether, and how, the applicant documented its reason for the lack of progress.
- C. **ORGANIZATIONAL EXPERIENCE:** This section of the work plan must include information on your organizational experience for timely and successfully achieving the objectives of the proposed project.
- D. **STAFF AND RESOURCES:** This section of the work plan should include information on your staff expertise/qualification, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the proposed project. EPA will not consider the qualifications, experience, and expertise of named subawardees/subgrantees and/or named contractor(s) unless certain conditions/requirements are met. For additional information see Section IV.G of this RFP.

Please Note: In evaluating applicants under the factors as described in Section V.A.8 (A and B) of this RFP, EPA will use the information provided by the applicant and may also consider relevant information from other sources, including information from EPA files and information from current and prior federal agency grantors to verify and/or supplement the information provided by the applicant.

If you do not have any relevant or available past performance or reporting information, please indicate this and you will receive a neutral score for these factors under Section V.A.8 of this RFP. A neutral score is half of the total points available. If you do not provide any response for this item, you may receive a score of zero (0) for these factors.

Section 9. Budget Narrative and Detail

This section of the work plan 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 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 funds (e.g., any required or voluntary cost share/match if applicable).

A. EXPENDITURE OF AWARDED GRANT FUNDS: Applicants should provide a detailed discussion of their approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner.

B. BUDGET NARRATIVE:

- Description of the budget and estimated funding amounts for each work component/task.
- For applicants that provide a mandatory and/or voluntary cost share/match, 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. All matching funds are subject to the regulations governing matching fund requirements at 2 CFR Part 200. Any form of cost-share included in the Budget Detail must also be included on the SF 424 and SF 424A. Please see Section III.B of this RFP for more detailed information on cost-share.
- If a proposed cost-share is to be provided by a third-party, a letter of commitment is required

C. BUDGET TABLE:

- Applicants should use the following instructions, budget object class descriptions, and example table to complete the Budget Table section of the work plan, adding or deleting additional rows as necessary to accurately reflect the proposed project budget.
 - Applicants must **itemize** costs related to personnel, fringe benefits, travel, equipment, installation (labor) supplies, contractual costs, other direct costs, indirect costs, and total costs.
 - For applicants that provide a mandatory and/or voluntary cost share/match, the Budget Table must clearly specify the amount of federal funding and the cost-share amount for each category of total project costs for each category
- **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 (generally, paid employees of the applicant organization). 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 consultants, contractors, consortia members, or other partner organizations, which are included in the “Contractual” category; (2) costs for employees of subrecipients under subawards, 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 include, but are not limited to the cost of leave, employee insurance, pensions and unemployment benefit plans.

- **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) or related to proposed project activities (e.g. attendance at meetings). Travel costs do not include: (1) costs for travel of consultants, contractors, consortia members, or other partner organizations, which are included in the “Contractual” category; (2) travel costs for employees of subrecipients under subawards, which are included in the “Other” category.
- **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. 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 40 CFR 31.3 and 30.2. 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.
- **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/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. Leased or rented goods (equipment or supplies) should be included in the “Other” category. The applicant should list the proposed contract activities along with a brief description of the scope of work or services to be provided, proposed duration, and proposed procurement method (competitive or non-competitive), if known. If installation costs are included in the contractual costs, labor expenses shall itemized with the detailed number of hours charged and the hourly wage.
- **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, rebates, and subaward costs. Subawards (e.g., subgrants) 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. This term 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 and a description of the types of activities to be supported.
- **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. In order for indirect costs to be allowable, the applicant must have a federal or state negotiated indirect cost rate (e.g., fixed, predetermined, final or provisional), or must have submitted a proposal to the cognizant federal or state agency. Examples of Indirect Cost Rate calculations are shown below:

- Personnel (Indirect Rate x Personnel = Indirect Costs)
- Personnel and Fringe (Indirect Rate x Personnel & Fringe = Indirect Costs)
- Total Direct Costs (Indirect Rate x Total direct costs = Indirect Costs)
- Direct Costs, less distorting or other factors such as contracts and equipment
(Indirect Rate x (total direct cost – distorting factors) = Indirect Costs)

Example Budget Table

Line Item and Itemized Cost	EPA Funding	**Cost-Share
Personnel		
(1) Project Manager @ \$40/hr x 10 hrs/week x 52 wks		\$20,800
(1) Project Staff @ \$30/hr x 40 hrs/week x 40 wks	\$48,000	
TOTAL PERSONNEL	\$48,000	\$20,800
Fringe Benefits		
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
Travel		
Local mileage for PM: 100 mi/mo @ \$.17/mi x 12 mo	\$204	
Local mileage for Staff: 200 mi/mo @ \$.17/mi x 12 mo	\$408	
TOTAL TRAVEL	\$612	
Equipment		
25 DOCs + CCV @ \$5000 per unit	\$125,000	
25 DPFs with installation kit @ \$6,000 per unit	\$150,000	
10 New vehicles for Replacement @ \$100,000 per unit	\$250,000	\$750,000
10 Engines for Repower @ \$50,000 per unit	\$200,000	\$300,000
TOTAL EQUIPMENT	\$ 775,000	\$1,000,000
Supplies		
100 Replacement CCV filters @ \$10 per unit	\$1,000	
TOTAL SUPPLIES	\$1,000	
Contractual		
Retrofit Installation Services Contract	\$10,000	
TOTAL CONTRACTUAL	\$10,000	\$10,000
Other		
5 Subgrants to School Districts for School Bus Retrofits with DPFs. Each Subgrant @ \$50,000	\$250,000	
TOTAL OTHER	\$250,000	
Indirect Charges		
Federal Negotiated Indirect Cost Rate = 10%	\$4,800	\$2,080

(Indirect Rate x Personnel = Indirect Costs)		
TOTAL INDIRECT	\$4,800	\$2,080
TOTAL FUNDING	\$1,049,012	\$1,087,040
TOTAL PROJECT COST	\$2,136,052	

** Cost-share funds must also be included on the SF-424A as detailed in Section III.B of this RFP.

Section 10. Applicant Fleet Description

The Project Narrative must also contain an Applicant Fleet Description section. This information does not count toward the 11-page limit. See Section IV.D.3 of this RFP for detailed instructions on completing the Applicant Fleet Description portion of the Project Narrative. A sample format for the Applicant Fleet Description may be downloaded at www.epa.gov/file/2016-applicant-fleet-description-sample.

Attachments:

Cost-Share Commitment Letters: If applicable, project partners who are providing in-kind or monetary assistance must demonstrate their specific commitment to meet the proposed cost-share. This information does not count towards the 11-page limit.

Letters of Support/Partnership: If applicable, 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 more effectively perform the project. This information does not count towards the 11-page limit.

Mandated Measures Justification Supporting Information: If applicable, the proposal must include a clear and concise justification in Section 1 of the Project Narrative, for why/how the emission reductions proposed for funding are not subject to the Restriction for Mandated Measures under this RFP. **Applicants must provide sufficient detail and information to support the justification, including maintenance schedules and history, if applicable.** Please see **Section III.D.1** and **Appendix D** for more information. This supporting information should be provided as an attachment and does not count towards the 11-page limit.

Optional Attachments: Resumes: Provide resumes or curriculum vitae for all principal investigators and any other key personnel. These are not included in the 11-page limit.

APPENDIX C- Quantifying Environmental Outcomes

Diesel Emission Reductions for Most Project Types

To estimate the anticipated emission reductions from your project, use the Diesel Emissions Quantifier (DEQ) found at www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq. **Based on the vehicle/engine data you provided for the Applicant Fleet Description (described in Section IV.D.3 of this RFP) enter the same data into the DEQ.** For assistance getting started, please review the DEQ Frequently Asked Questions document found at www.epa.gov/sites/production/files/2015-08/documents/420f13008.pdf. Please note you can group entries together to minimize the number of DEQ runs required (model year, vehicle miles traveled, idling hours, usage rate, and horsepower). While it is not required that you log in to use the DEQ, 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 Lifetime Amount Reduced for each of the listed pollutants (NO_x, PM, HC, CO, CO₂) in Section 2 “Results – Outputs and Outcomes,” of your work plan.

In order to calculate CO₂ emission reductions, you must input the amount of “diesel fuel reduced” and/or “reduced idling hours” when inputting technology information for the vehicle group.

Lifetime	NO _x (tons)	PM (tons)	HC (tons)	CO (tons)	CO ₂ (tons)	Diesel-Equivalent (gallons)
Baseline of Entire Fleet	7.8325	0.1885	0.0786	1.4534	112.3719	10,123.592:
Baseline of Engines Retrofitted	7.8325	0.1885	0.0786	1.4534	112.3719	10,123.592:
Percent Reduced(%)	0.0%	0.2%	0.5%	0.3%	0.0%	0.0%
Amount Reduced	0.0000	0.0004	0.0004	0.0044	0.0000	0.0000
Amount Emitted After Retrofit, Retrofitted Engines	7.8325	0.1882	0.0782	1.4490	112.3719	10,123.592:
Amount Emitted After Retrofit, Entire Fleet	7.8325	0.1882	0.0782	1.4490	112.3719	10,123.592:
Capital Cost Effectiveness (\$/ton), Retrofitted Engines	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Cost Effectiveness (\$/ton), Retrofitted Engines	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Note: The lifetime results are dependent on each vehicle group's remaining life. To determine the remaining life for each vehicle group, divide the lifetime results by the annual results using the Detailed Results tables below

Note: “ton” refers to a short ton; a unit of mass equal to 2,000 pounds (907.18474 kg).

For further instruction on using the DEQ, please refer to www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq. Additional assistance is available by calling the Clean Diesel Helpline at 877-NCDC-FACTS (877-623-2322) or emailing cleandiesel@epa.gov.

Alternative Methods

If you are unable to use the DEQ, you may use the following alternative methods for calculating emission reductions:

- Motor Vehicle Emissions Simulator (MOVES) - www3.epa.gov/otaq/models/moves/
- National Mobile Inventory Model (NMIM) - www3.epa.gov/otaq/nmim.htm
- Mobile Model (on-road vehicles) - www3.epa.gov/otaq/mobile.htm
- Nonroad Model (nonroad engines, equipment, and vehicles) - www3.epa.gov/otaq/nonrdmdl.htm

If an alternative method is used you must thoroughly describe and document your methods within Section 2 “Environmental Results,” of your work plan.

Diesel Emission Reductions Above and Beyond any Restriction for Mandated Measures

No funds awarded under this RFP shall be used to fund the costs of emission reductions that are mandated under federal law. See Section III.D.1 of this RFP for more information on the Restriction for Mandated Measures.

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

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

Follow the instructions above to run the DEQ. From the DEQ results page (example shown below), enter the Annual Amount Reduced Per Year in the spaces provided below.

Summary Emissions Results							Detailed Results	Download Results	Health Benefits
Annual	NOx (tons/year)	PM (tons/year)	HC (tons/year)	CO (tons/year)	CO2 (tons/year)	Diesel-Equivalent (gallons/year)			
Baseline of Entire Fleet	7.7369	0.1862	0.0776	1.4356	111.0000	10,000.0000			
Baseline of Engines Retrofitted	7.7369	0.1862	0.0776	1.4356	111.0000	10,000.0000			
Percent Reduced (%)	0.0%	0.2%	0.5%	0.3%	0.0%	0.0%			
Amount Reduced Per Year	0.0000	0.0004	0.0004	0.0043	0.0000	0.0000			
Daily	NOx (kg/day)	PM (kg/day)	HC (kg/day)	CO (kg/day)	CO2 (kg/day)	Diesel-Equivalent (gal/day)			
Kilograms Reduced Per Day (kg/day)	0.0000	0.0009	0.0010	0.0107	0.0000	0.0000			

Note: “ton” refers to a short ton; a unit of mass equal to 2,000 pounds (907.18474 kg).

NO_x (tons/yr) PM (tons/yr) HC (tons/yr) CO (tons/yr) CO₂ (tons/yr)

Note: These are the Annual results, not 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 (NO_x, PM, HC, CO, CO₂) in Section 2 “Results,” of your work plan.

For example, if the mandate is slated to occur in 2018 and the retrofit will take place in 2014, then multiply the highlighted values above by 4 (2018 - 2014=4). Thus, the calculated lifetime emissions would be as follows:

0.000*4=	0.027*4=	0.095*4=	0.259*4=	0.000*4=
<u>0.00</u>	<u>0.108</u>	<u>0.380</u>	<u>1.036</u>	<u>0.000</u>
NO _x (tons)	PM (tons)	HC (tons)	CO (tons)	CO ₂ (tons)

Option 2: To calculate emission reduction benefits for emission 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 emission benefits that may be claimed.

Follow the instructions above to run the DEQ using the target engines and the technologies/emission reductions that are required by the mandate. From the DEQ results page, enter the mandated Annual Amount Reduced Per Year in the spaces provided below.

 NO_x (tons/yr) PM (tons/yr) HC (tons/yr) CO (tons/yr) CO₂ (tons/yr)

Note: These are the Annual results, not the Lifetime Results.

Then, follow the instructions above to run the DEQ using the target engines and the technologies/emission 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 Annual Amount Reduced Per Year in the spaces provided below.

 NO_x (tons/yr) PM (tons/yr) HC (tons/yr) CO (tons/yr) CO₂ (tons/yr)

Note: These are the Annual results, not the Lifetime Results.

Subtract the mandated values for each pollutant by the proposed project values and then enter the calculated lifetime emissions for each of the listed pollutants (NO_x, PM, HC, CO, CO₂) in Section 2 “Results,” of your work plan.

Diesel Emission Reductions for Marine Shore Power Connection Systems

A method to determine baseline emissions of your project is available in the following publication: Rulemaking to Consider Adoption of Proposed Regulations to Reduce Emissions from Diesel Auxiliary Engines on Ocean-Going Vessels while at Berth at a California Port (Appendix B: Emission Inventory Methodology); California Air Resources Board (December 6, 2007) which is available at www.arb.ca.gov/ports/shorepower/shorepower.htm. While this report provides information specific to California ports, the method used in this report can be used in other jurisdictions.

To determine the offsetting emissions of electrical power use from shore-side power, EPA provides the following model to assess these emissions offsets: The Emissions & Generation Resource Integrated Database (eGRID). This is a comprehensive inventory of electric power systems which uses available plant-specific data for all U.S. electricity generating plants that provide power to the electric grid and report data to the U.S. government. The eGRID contains air emissions data for nitrogen oxides, sulfur dioxide, carbon dioxide, and mercury. Download eGrid and directions at www.epa.gov/energy/egrid.

Quantifying Black Carbon Emissions

For the purposes of this RFP, Black Carbon emissions may be estimated by applying a conversion factor of 75% to the PM emission numbers calculated above.

APPENDIX D – Mandated Measures Justification

As stated in Section III.D.1 of this RFP, projects involving locomotives and marine engines will not be considered for funding under this RFP if the emission reductions proposed for funding 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 under this RFP if the emission reductions proposed for funding are required by EPA’s RICE rule, “National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ).

All proposals 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 emission reduction are not subject to the Restriction for Mandated Measures under this RFP. The justification must clearly demonstrate why/how:

- **the engines are exempt from the requirements of EPA’s rule; or**
- **emission reductions funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule; and/or**
- **emission 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 proposal, and does not count towards the 11-page limit.

Applicants are responsible for addressing all applicable parts of the rule in their justification for why/how the emission reductions proposed for funding are not subject to the Restriction for Mandated Measures under this RFP.

Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder

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, and in Section III.D.1 of this RFP, 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 engine are 600 horsepower engines and are therefore exempt from the rule requirements.

As outlined above, and in Section III.D.1 of the RFP, certain locomotives and marine engines may be subject to the rule requirements, but the applicant may be able to demonstrate that the emission reduction funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule and/or emission 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 emission 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 here www.epa.gov/otaq/certdata.htm, 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 emission reductions proposed for EPA funding are not subject to the Restriction for Mandated Measures under this RFP.

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 here www.epa.gov/otaq/certdata.htm, and have determined that at this time there is one certified remanufacture kit available for this engine: [insert kit info].

However, emission 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 emission reductions that could be achieved by the application of the certified kit to the existing engine and the emission reductions that will be achieved by the activities proposed from funding under the grant. The applicant should calculate the difference between the required emission reductions and the proposed emission reductions, and should be able to clearly demonstrate that emission 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 RFP.

Please note that failure to submit the required "Mandated Measured Justification" will render the applicant's entire proposal ineligible and the proposal will not be reviewed.

Additional Resources:

- Final Rule: www.gpo.gov/fdsys/pkg/FR-2008-06-30/pdf/R8-7999.pdf
- Fact Sheet: EPA Finalizes More Stringent Emissions Standards for Locomotive Engines and Marine Compression-Ignition Engines: www3.epa.gov/otaq/regs/nonroad/420f08004.pdf
- Fact Sheet: Control of Emissions from Idling Locomotives: www3.epa.gov/otaq/regs/nonroad/locomotv/420f13050.pdf
- Summary of locomotive emission standards: www.epa.gov/sites/production/files/2016-03/documents/420b16024.pdf
- Frequently Asked Questions from Marine Engine Owners and Rebuilders about EPA's Marine Remanufacture Program: www.epa.gov/otaq/regs/nonroad/marine/ci/420f09003.pdf
- Summary of marine emission standards: www.epa.gov/sites/production/files/2016-03/documents/420b16025.pdf
- Marine and Locomotive Certified Remanufacture Systems: www3.epa.gov/otaq/certdata.htm

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 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.

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 and 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 \$38,060,384 per year in 2014 (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

“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.

Switch Locomotives: 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).

Voluntary Emission Reductions: 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 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

“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).

Remanufactured Marine Engines: 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 emission level of the engine as rebuilt according to the manufacturer’s specification but before the installation of the remanufacture system) without increasing NO_x emissions (within 5 percent).

If several certified systems are available, we will allow any of them to 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 emission 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 RFP if the emission 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):
 - o 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
 - o 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 RFP will fall under #2, above.

Sufficient Justification

The applicant must demonstrate that the emission reductions funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule and/or emission 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 emission reductions from the target engines are achieved prior to any compliance dates and/or in are in excess of any emission 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.

RICE Rule Application Navigation Tool

EPA provides a RICE regulation navigation tool. This tool prompts users by asking questions regarding their stationary diesel engine to help users determine how the RICE measure apply to their case. The DERA program recommends that all applicants applying for projects which include stationary engines use this tool and include the results in their applications.

RICE Rule Navigation Tool Site: www3.epa.gov/ttn/atw/rice/output/quiz.html.

Disclaimer: The content provided in this software tool is intended solely as assistance for potential reporters to aid in assessing requirements for compliance under the RICE Rule. Any variation between the rule and the information provided in this tool is unintentional, and, in the case of such variations, the requirements of the rule govern. Use of this tool does not constitute an assessment by EPA of the applicability of the rule to any particular facility. In any particular case, EPA will make its assessment by applying the law and regulations to the specific facts of the case.

APPENDIX E - Proposal Submission Checklist

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

- Standard Form SF 424 – Application for Federal Assistance
- Standard Form SF 424A – Budget Information
- Project Narrative (no more than 11 pages)
 - Cover Page
 - Work Plan
 - 1. Project Summary and Approach
 - 2. Project Location
 - 3. Project Sector
 - 4. Benefits to the Community
 - 5. Community Engagement and Partnerships
 - 6. Project Sustainability
 - 7. Environmental Results – Outputs, Outcomes and Performance Measures
 - 8. Programmatic Capability and Past Performance
 - 9. Budget Narrative and Detail
 - 10. Applicant Fleet Description information (not included in page limit)
 - Cost-Share Commitment Letters, if applicable (not included in page limit)
 - Letters of Support/Partnership, if applicable (not included in page limit)
 - Mandated Measures Justification Supporting Information, if applicable (not included in page limit)
 - Optional Attachments (not included in page limit)