AGENCY: ENVIRONMENTAL PROTECTION AGENCY (EPA)

TITLE: 2020 Diesel Emission Reduction Act (DERA) National Grants

ACTION: Request for Applications (RFA)

RFA NUMBER: EPA-OAR-OTAQ-20-02

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NO: 66.039

IMPORTANT DATES

Monday, December 9, 2019 RFA OPENS

Wednesday, February 26, 2020 RFA CLOSES – APPLICATIONS DUE

April-May 2020 ANTICIPATED NOTIFICATION OF SELECTION

June-October 2020 ANTICIPATED AWARD

Application packages must be submitted electronically to EPA through Grants.gov (www.grants.gov) no later than **Wednesday**, **February 26**, **2020**, at **11:59 p.m.** (ET) to be considered for funding.

FUNDING / AWARDS: EPA anticipates awarding approximately \$44 million in DERA funding under this announcement. Awards will be selected and managed by EPA's ten regional offices. EPA anticipates 2 to 8 cooperative agreement awards per EPA region, subject to the availability of funds, the quality of applications received, and other considerations.

SUMMARY: EPA's Office of Transportation and Air Quality is soliciting applications nationwide for projects that achieve significant reductions in diesel emissions.

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 such as those used in construction, handling of cargo, agriculture, mining or energy production.

Eligible diesel emissions reduction solutions include verified retrofit technologies such as exhaust after-treatment technologies, engine upgrades, and cleaner fuels and additives, verified idle reduction technologies, verified aerodynamic technologies, verified low rolling resistance tires, certified engine replacements and conversions, and certified vehicle or equipment replacement.

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 diesel fleets or b) have, as their principal purpose, the promotion of transportation or air quality. Although private fleet owners are not eligible to apply directly to EPA for DERA funding, both public and private fleets can benefit from the programs implemented by DERA national grant recipients.

Priority for funding is given to fleets operating in areas designated as having poor air quality and fleets which service goods movement facilities. Further priority for funding is given to projects with outcomes that benefit affected communities, those that engage affected communities in the design and performance of the project, and those which demonstrate the ability to promote and continue efforts to reduce emissions after the project has ended.

Funding Opportunity Information Sessions

Wednesday, December 11, 2019 at 1:00 p.m. (ET) Wednesday, December 18, 2019 at 3:00 p.m. (ET) Tuesday, January 14, 2020 at 3:00 p.m. (ET)

The EPA will host several information sessions regarding this RFA. EPA encourages potential applicants to take advantage of these information sessions to learn more about the DERA program and the grant application process. EPA will highlight any changes to the program from previous years, review eligibility criteria, funding limits and mandatory cost share requirements, and discuss the available options for funding partner fleets. Participants will have the opportunity to have their questions answered by EPA in a public forum. Pre- registration is not required. Webinar links and dial-in information for the information sessions can be found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#2020.

QUESTIONS AND ANSWERS: Applicants are encouraged to review the questions and answers posted at www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa for further clarification of this Request for Applications. EPA will respond to questions from applicants regarding threshold eligibility criteria, administrative issues related to the submission of the application, and requests for clarification about any of the language or provisions in the announcement through the questions and answers document.

Applicants may email written questions to: cleandiesel@epa.gov. All questions submitted via email by 4:00 p.m. ET each Friday during the RFA open period will be answered and posted in the questions and answers document the following week. The deadline for submitting questions via email is Friday, February 14, 2020 at 4:00 p.m. ET. The final posting of the questions and answers document will be Wednesday, February 19, 2020 at 4:00 p.m. ET.

Want to learn more about DERA?

www.epa.gov/cleandiesel

DERA Fourth Report to Congress

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I. FUNDING OPPORTUNITY DESCRIPTION

A. Background

Reducing emissions from diesel engines is one of the most important air quality challenges facing the country. Despite EPA's diesel engine and fuel standards for new engines, the nearly ten million legacy 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 address these diesel emissions and protect public health and air quality, EPA is authorized under Diesel Emission Reduction Act (DERA) to offer funding assistance to accelerate the upgrade and turnover of legacy diesel fleet. Fiscal Year 2008 was the inaugural year of funding for DERA, and since then EPA has awarded over \$749.0 million on 790 grant projects and 420 rebate projects to reduce diesel emissions nationwide. The DERA program promotes an array of diesel emission strategies by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations and state and local officials to address the varying priorities of different regions and sectors. DERA supports environmental justice by prioritizing emissions reductions in areas receiving disproportionate impacts from diesel fleets to provide an environment where all people enjoy the same degree of protection from environmental and health hazards.

This DERA National Grants Request for Applications (RFA) is a competitive grant program. The DERA program has two other competitive funding opportunities in addition to the DERA National Grants program: the DERA School Bus Rebates program and the DERA Tribal Grants program. While school bus replacement is one of many eligible activities under the DERA National Grant program (this RFA), the DERA School Bus Rebates program provides funding only for school bus replacement. Typically, the DERA School Bus Rebates program application period opens annually in the fall, requires a one-page application form, rebate recipients are selected through a lottery process, and requires that school bus replacements are completed in less than one year. Information on EPA's School Bus Rebates program can be found at www.epa.gov/cleandiesel/school-bus-rebates-diesel-emissions-reduction-act-dera. Additionally, although tribes are eligible to apply for funding under this RFA, the DERA program also expects to issue a separate DERA Tribal Grants RFA in 2020. Please visit the following webpage for more information and updates: www.epa.gov/cleandiesel/clean-diesel-tribal-grants.

B. Scope of Work

DERA grants provide funding to eligible recipients so that they may implement programs which incentivize and accelerate the upgrading or retirement of the legacy diesel fleet. Eligible activities include the retrofit or replacement of existing diesel engines, vehicles and equipment with EPA and California Air Resources Board (CARB) certified engine configurations and verified retrofit and idle reduction technologies. DERA grants cannot fund research and

development and DERA grants cannot fund technology demonstration, commercialization, certification or verification.

1. Summary of Program Requirements

- **a.** Each application may only request funding from one EPA regional office as defined in Section IV.A
- **b.** The amount of federal funding requested per application must not exceed the amount specified for each Region as defined in Section II.A., Table 5.
- **c.** Each applicant can an submit a total of ten separate and distinct applications, but no more than three per Region as defined in Section IV.B.
- **d.** Recipients may directly implement projects by targeting vehicles and equipment that are owned by the recipient organization. Alternatively, a recipient may partner with public and private fleet owners and provide them with subgrants or rebates so that they may address the emissions from their fleets. See **Appendix E** for detailed information on how to fund projects and partnerships.
- **e.** To be eligible for funding, new vehicles and technologies must meet the eligibility criteria defined in Section I.B.3. and 4.
- **f.** To be eligible for funding, existing vehicle, engines, equipment and technologies must meet the ownership and usage criteria defined in Section I.B.6.
- **g.** To be eligible for funding, existing vehicle, engines, equipment and technologies must have at least three years of remaining life as defined in Section I.B.6.c.
- **h.** Eligible project costs directly related to the implementation, management, and oversight of the project include recipient and subrecipient personnel and benefits, equipment, contractual, travel, supplies, subgrants and rebates, and indirect costs. Specific eligible and ineligible project costs are provided in Section I.B.5. and funding restrictions are provided in Section III.D.
- **i.** EPA funding for eligible vehicles, engines, equipment and associated installation costs is limited to the cost shares defined in Section III.B.1.
- **j.** Replacement projects require scrappage of the existing engine and, for full vehicle/equipment replacement, the chassis as defined in Section III.D.8.
- **k.** DERA project eligibility or approval does not waive any applicable regulatory requirements for equipment owners, operators, manufactures, installers and others.

2. Eligible Diesel Vehicles, Engines and Equipment: Projects may include the heavy-duty diesel emissions source type defined in Table 1, below.

Table 1: Eligible Diesel Vehicles, Engines and Equipment

Table 1: Eligible	e Dieser venicies, Engines and Equipment
	Includes diesel powered school buses of Type A, B, C and D. To be
School Buses ¹	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.
T	Includes diesel powered medium-duty and heavy-duty transit buses (see
Transit Buses	below).
	Includes diesel powered medium-duty and heavy-duty highway vehicles
Madinas dutu	with gross vehicle weight rating (GVWR) as defined below:
Medium-duty	Class 5 (16,001 -19,500 lbs GVWR);
or heavy-duty	Class 6 (19,501 - 26,000 lbs GVWR);
trucks	Class 7 (26,001 - 33,000 lbs GVWR);
	Class 8 (33,001 lbs GVWR and over)
Marine	Includes diesel powered Category 1, 2, and 3 marine engines and vessels.
Engines	includes diesel powered ediegoly 1, 2, and 3 marine engines and vessels.
Locomotives	Includes diesel powered line-haul, passenger, and switch engines and
Locomotives	locomotives.
Nonroad	Includes diesel powered engines, equipment and vehicles used in
engines,	construction, handling of cargo (including at ports and airports),
equipment or	agriculture, mining, or energy production (including stationary generators
vehicles	and pumps).

- a. Drayage Trucks: Eligible heavy-duty trucks include drayage trucks. A "drayage truck" means any Class 8 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. If an application for the replacement of drayage trucks is selected for funding, the grant recipient will be required to establish guidelines to ensure that any existing truck replaced with grant funds has a history of operating on a frequent basis over the prior year as a drayage truck, and to ensure any new truck purchased with grant funds is operated in a manner consistent with the definition of a drayage truck, as defined above. Sample drayage truck guidelines can be found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.
- **b.** Transport Refrigeration Units: Eligible nonroad equipment includes transport refrigeration units (TRUs). Please see the TRU Factsheet found at

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¹ Funding for school bus replacement is also available through EPA's School Bus Rebate Program. The rebate program consists of a one-page application form and rebate recipients are selected through a lottery process. Information on EPA's School Bus Rebate Program can be found at www.epa.gov/cleandiesel/school-bus-rebates-diesel-emissions-reduction-act-dera.

<u>www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa</u> for information on TRUs and eligible TRU projects.

- **3. Eligible Diesel Emissions Reduction Solutions:** Projects must include one or more of the following diesel emissions reduction solutions that use a certified engine configuration and/or a verified technology.
 - **a.** Vehicle and Equipment Replacements: Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can be replaced with newer, cleaner vehicles and equipment. Eligible replacement vehicles and equipment include those powered by diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery or fuel cell).

To be eligible for funding, vehicles and equipment must be powered by engines certified by EPA and, if applicable, CARB emission standards. Zero tailpipe emissions vehicles and equipment do not require EPA or CARB certification. EPA's annual certification data for vehicles, engines, and equipment may be found at: www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment. EPA's engine emission standards may be found at: www.epa.gov/emission-standards-reference-guide/all-epa-emission-standards. Engines certified by CARB, including those meeting CARB's Optional Low NO_x Standards, may be found by searching CARB's Executive Orders for Heavy-duty Engines and Vehicles, found at: www.arb.ca.gov/msprog/onroad/cert/cert.php.

b. Engine Replacement: Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can have their engines replaced with newer, cleaner engines. Eligible replacement engines include those certified for use with diesel or clean alternative fuel (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery or fuel cell).

To be eligible for funding, replacement engines must be certified to EPA or, if applicable, CARB emission standards. However, zero tailpipe emissions engine replacements do not require EPA or CARB certification. EPA's annual certification data for vehicles, engines, and equipment may be found at: www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment. EPA's engine emission standards may be found at: www.epa.gov/emission-standards-reference-guide/all-epa-emission-standards. Engines certified by CARB, including those meeting CARB's Optional Low NO_x Standards, may be found by searching CARB's Executive Orders for Heavy-duty Engines and Vehicles, found at: www.arb.ca.gov/msprog/onroad/cert/cert.php.

c. Certified Remanufacture Systems: Generally, a certified remanufacture system is applied during an engine rebuild and involves the removal of parts on an engine and replacement with parts that cause the engine to represent an engine configuration which is cleaner than the original engine. Some locomotives and marine engines can be upgraded through the application of a certified remanufacture system (i.e. kit). Engine

remanufacture systems may not be available for all engines, and not all remanufacture systems may achieve an emissions benefit. Applications for certified remanufacture systems should include a discussion of the availability of engine remanufacture systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the upgrade will result in a PM and/or NOx emissions benefit. If a certified remanufacture system is applied at the time of rebuild, funds under this award cannot be used for the entire cost of the engine rebuild, but only for the cost of the certified remanufacture system and associated labor costs for installation of the kit.

To be eligible for funding, remanufacture systems for locomotives and marine engines must be certified by EPA at the time of acquisition. List of certified remanufacture systems are available at: www.epa.gov/compliance-and-fuel-economy-data/engine-certification-data, and additional information on remanufacture systems is available at: www.epa.gov/vehicle-and-engine-certification/remanufacture-systems-category-1-and-2-marine-diesel-engines.

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 engines and/or is designed to provide services (such as heat, air conditioning, and/or electricity) to vehicles and equipment that would otherwise require the operation of the main drive or auxiliary engine(s) while the vehicle is temporarily parked or remains stationary.

The eligible idle reduction technologies by associated vehicle type are below. To be eligible for funding under 1) through 4) below, these technologies must be on EPA's SmartWay Verified Technologies list (www.epa.gov/verified-diesel-tech/smartway-technology) at the time of acquisition.

- 1) Long haul Class 8 trucks equipped with sleeper cabs:
 - a) Auxiliary power units and generator sets
 - **b**) Battery air conditioning systems
 - c) Thermal storage systems
 - **d)** Fuel operated heaters (direct fired heaters)
 - e) Electrified parking spaces (truck stop electrification)
- 2) School buses: Fuel operated heaters (direct fired heaters)
- 3) Transport refrigeration units: Electrified parking spaces

Please see the TRU Factsheet found at www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa for information on TRUs and eligible TRU projects.

- 4) Locomotives:
 - a) Automatic engine shut-down/start-up systems
 - **b)** Auxiliary power units and generator sets
 - c) Fuel operated heaters (direct fired heaters)

d) Shore power connection systems

No funds awarded under this RFA shall be used for locomotive shore connection system projects that are expected to be used less than 1,000 hours/year.

5) Marine vessels: Shore power connection systems

Funding may support new installations, or expansions of existing shore power systems. More information on marine shore power connection systems may be found at www.epa.gov/verified-diesel-tech/learn-about-marine-technology. To be eligible for funding, marine shore power projects must meet the following criteria:

- **a)** 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).
- **b)** Shore power connection systems must be supplied with electricity from the local utility grid.
- c) Demonstration that the proposed system has the capacity, demand, and commitment to be used for more than 1,000 megawatt-hours per year. Smaller projects will be considered if the applicant can demonstrate cost effectiveness.
- **d)** Due to the unique nature and custom design of marine shore power connection systems, EPA will review and approve marine shore power connection systems on a case-by-case basis. If the project application is selected for funding, the final design of the marine shore power connection system will require specific EPA approval prior to purchase and installation.
- **e**) Applicants must commit to reporting usage information to EPA for five years after the system is operational.
- f) Shore power capable vessels docked at a berth where shore power is available must be required to turn off the vessel's engines and use the shore power system, with limited exceptions for extreme circumstances.
- **g**) Applicants proposing marine shore power connection systems will need to include the following information in their workplan:
 - 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 use 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 (megawatt-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 emissions reductions based on the methodology in **Appendix C**.

e. Verified Retrofit Technologies: Diesel engine retrofits are one of the most costeffective solutions for reducing diesel engine emissions. Retrofits include engine exhaust
after-treatment technologies, such as diesel oxidation catalysts (DOCs), diesel particulate
filters (DPFs), closed crankcase filtration systems (CCVs), and selective catalytic
reduction systems (SCRs). Manufacturer engine upgrades which achieve specific levels
of emision reductions by applying a package of components have been verified as
retrofits for some nonroad and marine engines. Several systems which convert a
conventional diesel engine configuration to a hybrid-electric system have been verified as
retrofits. Some cleaner fuels and additives have been verified as retrofits by EPA and/or
CARB to achieve emissions reductions when applied to an existing diesel engine. Older,
heavy-duty diesel vehicles that will not be retired for several years are good candidates
for verified retrofit technologies. EPA suggests that applicants proposing to install
verified retrofit technologies consult with suppliers to confirm that the proposed
vehicles/engines and their duty-cycles are good candidates for the technology.

To be eligible for funding, verified retrofit technologies must be on EPA's (www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel) or CARB's (www.arb.ca.gov/diesel/verdev/vt/cvt.htm) Verified Technologies lists at the time of acquisition, must be used only for the vehicle/engine application specified on the lists, and must meet any applicable verification criteria. EPA will not fund stand-alone cleaner fuel/additive use. To be eligible for funding, verified fuels and additives must be for new or expanded use, and must be used in combination, and on the same vehicle, with a new eligible verified engine retrofit or an eligible engine upgrade or an eligible certified engine, vehicle, or equipment replacement funded under this RFA.

f. Clean Alternative Fuel Conversions: Existing highway diesel engines can be altered to operate on alternative fuels such as propane and natural gas by applying an alternative fuel conversion kit.

To be eligible for funding, alternative fuel conversion systems must be certified by EPA and/or CARB or must be approved by EPA for Intermediate-Age engines. EPA's lists of "Certified Conversion Systems for New Vehicles and Engines" and "Conversion Systems for Intermediate-Age Vehicles and Engines" are available at www.epa.gov/vehicle-and-engine-certification/lists-epa-compliant-alternative-fuel-conversion-systems; CARB's list of "Approved Alternate Fuel Retrofit Systems" are available at: www.arb.ca.gov/msprog/aftermkt/altfuel/altfuel.htm.

To be eligible for funding, conversion systems for engine model years 2006 and earlier must achieve at least a 30% NO_x reduction and a 10% PM reduction from the applicable certified emission standards of the original engine. To be eligible for funding, conversion systems for engine model years 2007 and newer must achieve at least a 20% NO_x reduction with no increase in PM from the applicable certified emission standards of the original engine. Applications for clean alternative fuel conversions should include a discussion of the availability of conversion systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the conversions result in the required emissions benefit.

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

To be eligible for funding, technologies must be on EPA's verified aerodynamic technologies list (www.epa.gov/verified-list for low rolling resistance new and retread tire technologies list (www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-lrr-new-and-retread-tire) at the time of acquisition, must be used only for the application specified on the lists, and must meet any applicable verification criteria. EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. To be eligible for funding, these technologies must be combined on the same vehicle with the new installation of an exhaust after-treatment retrofit funded under this RFA.

4. Project Eligibility Criteria: Existing engines and new vehicles, engines, and technologies must meet the eligibility criteria defined below to be eligible for funding.

Table 2: Medium and Heavy-Duty Truck, Transit Bus, and School Bus Project Eligibility

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Verified Idle Reduction, Tires, or Aero- dynamics	Vehicle or Engine Replacement: EMY 2018+ (2014+ for Drayage)	Vehicle or Engine Replacement: EMY 2018+ Zero Emission ² or Low-NO _x	Clean Alternative Fuel Conversion
older - 2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007 - 2009	No	No	Yes	Yes ¹	Yes	Yes	Yes
2010 - newer	No	No	No	Yes ¹	No	Yes	Yes

¹Auxiliary power units and generators are not eligible on vehicles with EMY 2007 or newer. ²Eligible fuel cell projects are limited to hydrogen fuel cell engine replacements for eligible urban transit buses, shuttle buses and drayage trucks, and hydrogen fuel cell engine replacements for eligible urban transit buses, shuttle buses, and drayage trucks.

Table 3. Nonroad Engine Project Eligibility

Tuble of I (one one Eng	Ve					
Current Engine Tier	Com	pression Ign	nition	Spark Ignition	Zero Emission ³	Verified Retrofit
	Tier 0-2	Tier 3-4i	Tier 4	Tier 2	Emission	
Unregulated – Tier 2	No	Yes ¹	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	No	No
		Verified				
Current Engine	Com	pression Igr	nition	Spark	77	
Tier				Ignition	Zero	Engine
Tier	Tier 0-2	Tier 3-4i	Tier 4	-	Zero Emission ⁴	Engine Upgrade
Unregulated – Tier 2	Tier 0-2	Tier 3-4i Yes ²	Tier 4 Yes	Ignition		C
				Ignition Tier 2	Emission ⁴	Upgrade

¹Tier 3 and Tier 4 interim (4i) allowed for vehicle/equipment replacement only when Tier 4 final is not yet available from OEM for 2020 model year equipment under the Transition Program for Equipment Manufacturers (TPEM).

²Tier 3 and Tier 4i engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in Section I.B.4.a., below.

³Eligible fuel cell projects are limited to hydrogen fuel cell equipment replacements for eligible terminal tractors/yard hostlers, stationary generators, and forklifts.

⁴Fuel cell engine replacement is not eligible.

Table 4: Marine Engine Project Eligibility

				Engine	& Ves	sel Replace	ement			
Engine Cate-	Engine Horse-	Current Engine	Compression Ignition			Spark	Zero	Certified Re- manufacture	Verified Engine	
gory	power	Tier	Tier 1-2	Tier 3	Tier 4	Ignition	Emission ²	System ³	Upgrade	
C1, C2	<803	Un- regulated – Tier 2	No	Yes	No	Yes	Yes	Yes	Yes	
C1, C2	≥804	Un- regulated – Tier 2	No	Yes ¹	Yes	Yes	Yes	Yes	Yes	
C1, C2	<803	Tier 3	No	No	No	Yes	Yes	No	No	
C1, C2	≥804	Tier 3	No	No	Yes	Yes	Yes	No	No	
C1, C2	≥804	Tier 4	No	No	No	No	No	No	No	
СЗ	All	Un- regulated - Tier 2	No	Yes	No	No	No	No	No	
C3	All	Tier 3	No	No	No	No	No	No	No	

¹Tier 3 engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in Section I.B.4.a., below. Over 800 HP, Tier 3 engines are not eligible for full vessel replacement.

Table 5: Locomotive Engine Project Eligibility

Current Locomotive	I	_	& Locor		Verified	Idle- Reduction ²	Certified Remanufacture System ⁴	
Tier	Tier 0-2+	Tier 3	Tier 4	Zero Emission ¹	Retrofit	Technology		
Unregulated - Tier 2+	No	Yes ³	Yes	Yes	Yes	Yes	Yes	
Tier 3	No	No	Yes	Yes	Yes	Yes	Yes	
Tier 4	No	No	No	No	No	Yes	No	

¹Fuel cell engine and locomotive replacements are not eligible.

²Fuel cell engine and vessel replacements are not eligible.

³Some marine engine projects may be subject to the restriction on mandated measures.

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

³Tier 3 engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in Section I.B.4.a., below. Tier 3 is not eligible for locomotive replacement.

⁴Some locomotive engine projects may be subject to the restriction on mandated measures.

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

- a. Best Achievable Technology: All new nonroad and locomotive engines are now manufactured to meet the EPA Tier 4 standards. All new Category 1 and 2, 804 horsepower and above marine engines are now manufactured to meet the EPA Tier 4 standards. Applicants must commit to using the best achievable technology for the project. Applicants replacing these nonroad, marine, and locomotive engines are expected to use Tier 4 engines if Tier 4 engines with the appropriate physical and performance characteristics are available. If selected for funding, applicants will be required to submit a best achievable technology analysis to EPA for approval before Tier 3 or Tier 4i engines can be purchased.
 - 1) **Application Requirements**: Applicants must commit to using Tier 4 engines if Tier 4 engines with the appropriate physical and performance characteristics are available. Applicants anticipating the use of Tier 3 or Tier 4i engines should discuss their rationale for proposing Tier 3 or Tier 4i engine replacements in Section 1 of their project narrative.
 - 2) Best Achievable Technology Analysis Requirements: If selected for funding, applicants will be required to submit a best achievable technology analysis to EPA for approval before Tier 3 or Tier 4i engines can be purchased, as defined below. This analysis is not required at the time of grant application submittal to EPA but is required before Tier 3 or Tier 4i engines can be purchased with grant funds. Costs for engineering analysis may be included in the project budget.
 - a) The analysis must be prepared by the engine manufacturer or installer.
 - **b**) Using good engineering judgment, the engine manufacturer or installer must determine that no engine certified to Tier 4 is produced by any manufacturer with the appropriate physical or performance characteristics to repower the equipment.
 - c) If the engine manufacturer or installer determines that no engine certified to Tier 4 is available with the appropriate performance characteristics, explain why certified Tier 4 engines produced by them and other manufacturers cannot be used as a replacement because they are not similar to the engine being replaced in terms of power or speed.
 - d) If there are available engines with the appropriate performance characteristics but the engine manufacturer or installer determines that no engine certified to Tier 4 is available with the appropriate physical characteristics, explain why certified engines produced by them and other manufacturers cannot be used as a replacement because their weight or dimensions are substantially different than those of the engine being replaced, or because they will not fit within the equipment's engine compartment.
 - e) In evaluating appropriate physical or performance characteristics, the engine manufacture or installer may account for compatibility with equipment components that would not otherwise be replaced when installing a new engine, including but not limited to transmissions or reduction gears, drive shafts, cooling systems, operator controls, or electrical systems. If the engine manufacturer or

- installer makes their determination on this basis, they must identify the equipment components that are incompatible with engines certified to Tier 4 and explain how they are incompatible and why it would be unreasonable to replace them.
- f) Identify the proposed Tier 3 or Tier 4i engines to be used and discuss the physical and performance characteristics of the engines that will ensure compatibility with the existing equipment. Quantify proposed emission reductions, PM cost effectiveness and NOx cost effectiveness for the proposed options.
- g) DERA project eligibility or approval does not supersede any regulatory requirements for equipment owners, operators, manufactures, installers and others, including but not limited to 40 CFR §1068.240, §1042.615, and §1033.601.
- 5. Eligible and Ineligible Project Costs: Eligible project costs are those costs directly related to the implementation, management, and oversight of the project, including recipient and subrecipient personnel and benefits, equipment, contractual, travel, supplies, subgrants and rebates, and indirect costs. The following list is not exhaustive. See Section III.D for additional funding restrictions.
 - **a.** Eligible project costs include the purchase price of eligible vehicles, engines and equipment as defined above in Section I.B.3. and 4. These costs are subject to the mandatory cost share requirements defined in Section III.B.1.
 - **b.** Eligible project costs can include mechanic/driver training related to the maintenance and operation of new technologies.
 - c. Eligible costs for battery electric powered vehicle, equipment and engine replacement projects can include the purchase and installation of one charging unit per vehicle, including the unit and charging cable, mount and/or pedestal. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. Ineligible costs include power distribution to the pedestal, electrical panels and their installation, upgrades to existing electrical panels or electrical service, transformers and their installation, wiring/conduit and its installation, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
 - **d.** Eligible costs for drayage truck replacement projects include the required/scheduled vehicle maintenance, as specified in the owner's manual, which is necessary to meet the warranty requirements for diesel particulate filters installed on drayage trucks. Funding for required maintenance is available for the duration of the project period.
 - e. Eligible costs for grid electric powered engine and equipment replacement projects can include the purchase and installation of certain equipment required for power delivery directly related to the new equipment. Eligible costs include design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. These costs are subject to the mandatory cost share

requirements defined in Section III.B.1. **Ineligible costs** include power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.

- f. Eligible costs for engine replacement projects can include equipment and parts included in the certified engine configuration and/or are required to ensure the effective installation and functioning of the new technology. Eligible costs include design and engineering, parts and materials, and installation. For engine replacement with battery, fuel cell, and grid electric, eligible costs include electric motors, electric inverters, battery assembly, direct drive transmission/gearbox, regenerative braking system, vehicle control/central processing unit, vehicle instrument cluster, hydrogen storage tank, hydrogen management system and fuel cell stack assemblies. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. Ineligible costs include cabs, tires, wheels, axles, paint, brakes, and mufflers.
- **g.** Eligible costs for engine remanufacture system projects can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. **Ineligible costs** include the entire cost of an engine rebuild if a certified remanufacture system is applied at the time of rebuild.
- **h.** Eligible costs for idle reduction technologies that are installed on the vehicle can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section III.B.1.
- i. Eligible costs for electrified parking space projects can include the purchase and installation of certain equipment required for power delivery directly related to the new equipment. Eligible costs include design and engineering, design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. **Ineligible costs** include power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
- j. Eligible costs for locomotive shore power connection projects can include the purchase and installation of certain equipment required for power delivery directly related to the new equipment. Eligible costs include design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. Ineligible costs include power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and on-site power generation systems that

power the equipment (e.g., solar and wind power generation equipment) and their installation.

- k. Eligible costs for marine shore power connection projects can include the purchase and installation of the shore side equipment and certain equipment required for power delivery directly related to the new equipment. Eligible costs include design and engineering, cables, cable management systems, shore power coupler systems, distribution control systems, grounding switches, service breakers, capacitor banks, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. Ineligible costs include shipside modifications to accept shore-based electrical power, power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g. batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
- **l.** Eligible costs for retrofit technologies that are installed on the vehicle can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. Eligible costs include design and engineering, DPF cleaning machines, spare DPFs for maintenance rotation, replacement CCV filters, and filter cleaning contracts during grant open period.
- **m.** Eligible costs for alternative fuel conversions can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section III.B.1.
- **n.** Eligible costs for aerodynamics and low rolling resistance tires can include the associated labor costs for installation. Eligible costs can include single-wide wheels only when a fleet is retrofitting from standard dual tires to SmartWay-verified single-wide low rolling resistance tires. These costs are subject to the mandatory cost share requirements defined in Section III.B.1. **Ineligible costs** include aluminum wheels.

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

6. Ownership, Usage and Remaining Life Requirements

a. The existing vehicle, engine, or equipment must be fully operational. Operational equipment must be able to start, move in all directions, and have all necessary parts to be operational.

- **b.** The participating fleet owner must currently own and operate the existing vehicle or equipment and have owned and operated the vehicle during the twenty-four months prior to upgrade.
- c. The existing vehicle, engine, or equipment must have at least three years of remaining life at the time of upgrade. Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding. The remaining life estimate is the number of years of operation remaining even if the unit were to be rebuilt or sold to another fleet. The remaining life estimate depends on the current age and condition of the vehicle at the time of upgrade, as well as things like usage, maintenance and climate.
- **d.** Highway Usage: To be eligible for funding, the existing vehicle must have accumulated at least 7,000 miles during each twelve months during the twenty-four months prior to upgrade. Vehicle mileage may be combined to reach the thresholds below where two vehicles will be scrapped and replaced with a single vehicle.
- **e.** Nonroad, Locomotive and Marine Usage: The engine operating hours of two units may be combined to reach the thresholds below where two units will be scrapped and replaced with a single unit.
 - 1) Agricultural Pumps: To be eligible for funding, agricultural pumps must operate at least 250 hours during each twelve-month period for the twenty-four months prior to upgrade.
 - 2) All Other Nonroad Engines: To be eligible for funding, nonroad engines must operate at least 500 hours during each twelve-month period for the twenty-four months prior to upgrade.
 - 3) Locomotive and Marine Usage: To be eligible for funding the existing locomotive and marine engines must operate at least 1,000 hours during each twelve-month period for the twenty-four months prior to upgrade.
- f. Documentation Requirements: Participating fleet owners must attest to each criterion in a.-e. above in a signed eligibly statement which includes each vehicle make, model, year, vehicle identification number, odometer/usage meter reading, engine make, model, year, horsepower, engine ID or serial number, and vehicle/equipment registration/licensing number and state. This documentation is not required at the time of application submittal to EPA but is required as part of programmatic reporting to verify the eligible use of grant funds. A sample eligibility statement may be found at www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.

7. DERA Programmatic Priorities

a. Priority Location – **Areas of Poor Air Quality**: Priority for funding is given to vehicles, engines and equipment operating in areas designated as having poor air quality. EPA will evaluate this under criteria 2.A. and B. under Section V.A. of this RFA. The term "project location" refers to the area(s) where the affected vehicles or engines equipment operate. A list of counties that have been designated as priority project

locations can be found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa. To receive points under this criterion, vehicles or equipment proposed for funding must be operated a majority of the time in one or more of the priority project locations. These counties were identified as priority project locations for the DERA program because they are:

- 1) Designated, as of the release date of this RFA, 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/green-book).
 - a) $PM_{2.5}$ 1997 Standard (Annual: 15 μ g/m³, 24-hour: 65 μ g/m³)
 - **b)** PM_{2.5} 2006 Standard (Annual: $15 \mu g/m^3$, 24-hour: $35 \mu g/m^3$)
 - c) $PM_{2.5} = 2012 \text{ Standard (Annual: } 12 \,\mu\text{g/m}^3, 24\text{-hour: } 35 \,\mu\text{g/m}^3)$
 - **d**) Ozone (O₃) 2008 Standard (8-hour: 0.075ppm)
 - e) Ozone (O₃) 2015 Standard (8-hour: 0.070ppm)
- 2) Where all or part of the population in the area is exposed to diesel PM concentrations above the 80th percentile for diesel PM. Data is sourced from the 2014 National-Scale Air Toxics Assessment (www.epa.gov/national-air-toxics-assessment/2014-national-air-toxics-assessment).
- **b. Priority Location Goods Movement Facilities**: Priority for funding is given to projects based on whether the vehicles/engines/equipment targeted for diesel emissions reductions are located at, or service, goods movement facilities as defined below. EPA will evaluate this under criterion 2.C. under Section V.A. of this RFA. Applicants should include the name of the specific port, airport, rail yard, terminal, or distribution center where the affected vehicles operate.
 - 1) Ports places alongside navigable water with facilities for the loading and unloading of passengers and/or cargo from ships, ferries, and other vessels
 - 2) Airports places where aircraft operate that have paved runways and terminals which include cargo, baggage and/or passenger-movement operations
 - 3) Rail Yards places where trains originate or terminate, or where they are distributed or combined
 - 4) Terminals freight and passenger stations at the end of carrier lines, or that serve as junctions at any point with other lines, that have facilities for the handling of freight and/or passengers
 - 5) Distribution Centers facilities that perform consolidation, warehousing, packaging, decomposition and other functions linked with handling freight, often in proximity to major transport routes or terminals, and which generate large amounts of truck traffic
- c. Benefits to the Community: Priority for funding is given to projects which address the needs and concerns of affected communities, especially any communities or populations that have faced or are facing environmental justice concerns and/or health disparities. EPA will evaluate this under criterion 3. under Section V.A. of this RFA. The term "affected communities," means communities, populations, groups, and other interested parties that are affected by the health, environmental and/or other issues that the project is

intended to address. The term "environmental justice concerns," generally relates to issues that have resulted in some minority, low-income, or tribal and indigenous communities 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. "Health disparities" are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that area experienced by socially disadvantaged populations.

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 emissions reductions that will take place. Applications should therefore describe both the population, community or group that will be affected by the project and how they will directly benefit from emissions reductions that will result from the project. Applications that can demonstrate how they will directly benefit communities with environmental justice concerns may be evaluated more favorably than others that do not. Applications that include both qualitative descriptions and quantitative estimates of current conditions and project-related benefits may be evaluated more favorably than others that do not.

Potential data sources for describing existing health disparities present in a community may include:

- Health statistics from public health agencies documenting elevated rates of death or disease within an area, compared to other areas.
- Information on an area's population describing limited access to health insurance coverage, access to and use of care, and quality of care that cannot be explained by variations in underlying health needs or treatment recommendations.
- Statistical estimates of life expectancy at birth, indicative of reduced life expectancy within a given area, relative to the surrounding region.
- Specific data sources include:
 - Estimates of life expectancy at birth for census tracts within the U.S. National Center for Health Statistics' U.S. Small-area Life Expectancy Estimates Project (USALEEP; www.cdc.gov/nchs/nvss/usaleep/usaleep.html)
 - The Institute for Health Metrics and Evaluation's "USA Health Map," including county-level trends in rates of death, disease, and risk factors (www.healthdata.org/data-visualization/us-health-map)

Factors potentially indicating disproportionate impacts to communities with environmental justice concerns include, but are not limited to:

- 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)
- 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: Priority for funding is given to projects which engage affected communities with respect to the design and performance of the project and which obtain support from project partners to more effectively perform the project. EPA will evaluate this under criterion 4. under Section V.A. of this RFA. The term "affected communities" means communities, populations, groups, and other interested parties that are affected by the environmental and/or other issues that the project is intended to address. Applicants will be evaluated based on the extent and quality of the applicant's efforts and plans to incorporate input from affected communities throughout the design and performance of the project. Community engagement and partnership efforts should include various organizations representing a broad spectrum of the community; examples include local residents as well as grassroots, neighborhood, school, faith-based, city council, business, local government, and other organizations. Applications with letters of commitment that demonstrate strong, long-term involvement throughout the project from a variety of project partners may be evaluated more favorably than others.
- **e. Project Sustainability**: Priority for funding is given to projects which can demonstrate the ability of the applicant and project partners to promote and continue efforts to reduce emissions after EPA funding for this project has ended. EPA will evaluate this under criterion 5. under Section V.A. of this RFA. Specifically, applications will be evaluated on whether the applicant and/or its project partners:
 - 1) have existing policies or new commitments to, by the end of the project period, adopt idle-reduction policies, adopt contract specifications requiring the use of cleaner, more efficient vehicles and equipment, complete an up to date mobile source equipment inventory, or adopt other strategies to promote and continue efforts to reduce diesel emissions.
 - 2) have a publicly available baseline mobile source emission inventory for PM2.5 and/or NOx that was completed after 2016 or commit to completing one before the end of the project period.
 - 3) have a publicly available plan to reduce mobile source emissions that includes specific $PM_{2.5}$ and/or NO_x emission targets that was completed after 2016 or commit to completing one before the end of the project period.
 - 4) have established or commit to establishing before the end of the project period, a clear point of contact in a public platform (e.g., newsletter, website) for community issues and complaints (specific to air quality or broader) and a publicly documented policy or process for getting community input on operations and projects that impact air quality. The process could be recent (within a year) or upcoming (before the end of the project period) meetings and/or a policy or process to otherwise get input (e.g., a standing citizens advisory committee).

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

Pursuant to Section 6a of EPA Order 5700.7A1, "Environmental Results under EPA Assistance Agreements," EPA must link proposed assistance agreements with the Agency's Strategic Plan. EPA also requires that grant applicants and recipients adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7A1, 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: The activities to be funded under this announcement support EPA's FY 2018-22 Strategic Plan. Awards made under this announcement will support Goal 1, "A Cleaner, Healthier Environment," Objective 1.1, "Improve Air Quality." Under this objective, EPA will "Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards." Applicants must explain in their application how their project will further this objective.

Please read EPA's FY 2018-2022 Strategic Plan (<u>www.epa.gov/planandbudget/strategicplan</u>) for more information.

EPA also requires that grant applicants adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7A1, Environmental Results under Assistance Agreements, www.epa.gov/sites/production/files/2015-03/documents/epa_order_5700_7a1.pdf). Applicants must include specific statements describing the environmental results of the proposed project in terms of well-defined outputs and, to the maximum extent practicable, well-defined outcomes that will demonstrate how the project will contribute to the priorities described above. Specifically, the proposed activities must reduce emissions from diesel fleets, thereby reducing local and regional air pollution of criteria pollutants and air toxics.

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

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

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

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

- engaging affected communities with respect to the design and performance of the project;
- the project's inclusion in a broader-based environmental or air quality plan;

- the implementation of contract specifications requiring the use of cleaner vehicles and equipment;
- a documented commitment to continue to identify and address air quality issues in the affected community;
- establishing a clear point of contact in a public platform for community issues and complaints;
- a publicly documented policy or process for getting community input on operations and projects that impact air quality;
- adoption of an idle reduction policy;
- the completion of a baseline mobile source emission inventory for PM_{2.5} and or NO_x;
- 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 RFA.

3. Outcomes: The term "outcome" means the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be environmental, behavioral, health-related or programmatic in nature, but must also be quantitative. They may not necessarily be achievable within an assistance agreement funding period. Applicants should follow the instructions in **Appendix C** of this announcement for calculating emissions reductions and cost effectiveness.

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 $(PM_{2.5})$,
 - \circ nitrogen oxides (NO_x),
 - o carbon monoxide (CO) and carbon dioxide (CO₂), and/or
 - o volatile organic compounds (VOCs).
- tons of pollution reduced annually;
- lifetime total project cost effectiveness for NO_x and PM_{2.5};
- lifetime capital cost effectiveness for NO_x and PM_{2.5};
- net reduction in gallons of diesel fuel used;
- benefits to the communities affected by the project, including improvements to human health and the environment, the local economy, social conditions, and the welfare of residents in such communities.

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

• community engagement and partnership;

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

Applicants anticipating the use of Tier 3 or Tier 4i engines should include annual and lifetime tons reduced and cost effectiveness estimates for Tier 4 replacements and the proposed Tier 3 or Tier 4i engine replacements.

- **4. Performance Measures.** The applicant should also develop performance measures they expect to achieve through the proposed activities and describe them in their application. These performance measures will help gather insights and will be the mechanism to track progress concerning successful processes and output and outcome strategies and will provide the basis for developing lessons to inform future recipients. It is expected that the description of performance measures will directly relate to the project's outcomes and outputs, including but not limited to:
 - oversight of project partners, subrecipients, and/or contractors and vendors;
 - tracking and reporting project progress on expenditures, purchases, and other fiscal activities;
 - tracking and reporting actual accomplishments versus proposed outputs/outcomes and proposed timelines/milestones;
 - tracking and reporting project progress on installations/replacements by maintaining an accurate project fleet description; and
 - measuring and reporting on outcomes by maintaining an accurate project fleet description and using EPA's diesel emissions quantifier. Efforts should be made to track, measure and report the actual vehicle miles traveled, hours of use/operation, and fuel use for all vehicles and equipment involved in the project.

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

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

D. Statutory Authority

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 (DERA) (Public Law 111-364) and subsequent appropriations acts and codified at 42 USC 16132. DERA authorizes the award of grants to reduce diesel emissions and diesel emissions exposure, particularly from fleets operating in areas designated by the Administrator as poor air quality areas. While EPA has authority under DERA to support grant programs, EPA's authority to obligate grant funds is subject to the availability of appropriated funds.

II. AWARD INFORMATION

A. What is the amount of funding available?

EPA anticipates awarding approximately \$44 million under this RFA, subject to the availability of funds, the quantity and quality of applications received, and other considerations. The funding is dispersed amongst the ten EPA regional offices by formula based on: 1) the percentage of the population that is living in $PM_{2.5}$ and Ozone nonattainment areas that is attributable to the region, and 2) the percentage of the total NO_x and diesel PM emissions from mobile sources that is attributable to the region.

Applicants may submit multiple applications in accordance with the limits defined in Section IV.B., however each application may only request funding from one EPA regional office, each application must be for a separate project, and the amount of federal funding requested per application must not exceed the amount specified for the applicable Region in Table 5, below.

Applicants must request funding from the EPA regional office which covers their geographic project location. The term "project location" as used in this RFA refers to the area(s) where the affected vehicles or engines operate. See Section IV.A. for additional information on project location and the geographic boundaries for each EPA regional office. Individual applications requesting EPA funding in excess of the amount specified below will not be considered.

In appropriate circumstances, EPA may incrementally fund applications by funding phases of proposed projects. If an applicant is selected for incremental funding, EPA and the applicant will negotiate a final workplan, timeline and budget which has clearly delineated activities or phases with separate budget estimates for each activity/phase of a project within the project period. A portion of the total requested funding will be awarded at the beginning of the project period for the specified activities/phases. Subject to the availability of funds, and other applicable considerations, additional funding may be awarded later as an incremental budget amendment to fund the remaining activities/phases of the project.

Table 5. Total Funding and Funding Limits by Region

Region	Total Anticipated Funding Per Region	Maximum Federal Funding Request Per Application
1	\$1,600,000	\$1,000,000
2	\$4,300,000	\$2,500,000
3	\$4,900,000	\$2,500,000
4	\$4,900,000	\$2,000,000
5	\$6,000,000	\$3,000,000
6	\$5,500,000	\$2,500,000
7	\$3,200,000	\$1,500,000
8	\$2,700,000	\$2,600,000
9	\$9,600,000	\$4,000,000
10	\$1,900,000	\$1,000,000

B. Partial Funding

In appropriate circumstances, EPA reserves the right to partially fund applications by funding discrete portions of proposed projects. If EPA decides to partially fund an application, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the application 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 2-8 cooperative agreements per EPA region will be made from this announcement subject to the availability of funds, the quantity and quality of applications 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 applications 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 September 1, 2020. EPA anticipates most projects can be completed within 24 months, however initial project periods of up to 36 months will be allowed where justified by the activities, timeline and milestones detailed in the workplan.

E. Funding Type

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

- close monitoring of the successful applicant's performance to verify the results proposed by the applicant;
- collaboration during performance of the scope of work;
- 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 quality².
- **2.** A nonprofit organization or institution that:
 - **a.** represents or provides pollution reduction or educational services to persons or organizations that own or operate diesel fleets; or
 - **b.** has, as its principal purpose, the promotion of transportation or air quality.

Non-profit organization, as defined by 2 CFR 200.70, means any corporation, trust, association, cooperative or other organization that: (1) is operated primarily for scientific, educational, service, charitable or similar purposes in the public interest; (2) is not organized primarily for profit; and (3) uses its net proceeds to maintain, improve and/or expand its operations.

Note that 2 CFR Part 200 specifically excludes the following types of organizations from the definition of "non-profit organization" because they are separately defined in the regulation: (i) institutions of higher education; and (ii) state, local and federally-recognized Indian tribal governments. While not considered to be a "non-profit organization(s)" as defined by 2 CFR 200.70, Institutions of Higher Education are, nevertheless, eligible to submit applications under

² School districts, municipalities, metropolitan planning organizations (MPOs), cities and counties are all generally eligible entities under this assistance agreement program to the extent that they fall within this definition.

this RFA to the extent they fall within the definition above. Hospitals operated by state, tribal, or local governments or that meet the definition of nonprofit at 2 CFR 200.70 are also eligible to apply. For-profit colleges, universities, trade schools, and hospitals are not eligible to apply.

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

For the purposes of this RFA, "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 RFA, the DERA program also expects to issue a separate FY 2020 DERA Tribal Grant RFA in 2020. Please visit the following webpage for more information and updates: www.epa.gov/cleandiesel/clean-diesel-tribal-grants.

B. Cost Sharing

Any form of cost share, mandatory or voluntary, must be included in the budget detail portion of the project narrative, and the application must describe how and when the applicant will obtain the cost share and how the cost share funding will be used. Applicants may use their own funds or other sources for cost share if the standards of 2 CFR Part 200, as applicable, are met. If the proposed cost share is to be provided by a named project partner, a letter of commitment is required. Only eligible and allowable costs may be used for cost share. Other federal grants may not be used as cost share under this RFA 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. Please note: DERA funds may not be used to meet mandatory cost sharing requirements for projects funded with environmental mitigation funds resulting from federal settlements (e.g. Volkswagen Environmental Mitigation Trust). Further, federal environmental mitigation funds may not be used to meet non-federal mandatory cost share requirements of any DERA grant.

1. Mandatory Cost Share Requirement: Projects are subject to the following funding limitations and mandatory cost share requirements:

Eligible Technologies	EPA Funding Limit	Mandatory Cost Share
Drayage Truck Replacement	50%	50%
Vehicle or Equipment Replacement with EPA Certified Engine	25%	75%
Vehicle or Equipment Replacement with CARB Certified Low NOx Engine	35%	65%
Vehicle or Equipment Replacement with Zero-tailpipe Emission Power Source	45%	55%
Engine Replacement with EPA Certified Engine	40%	60%
Engine Replacement with CARB Certified Low NOx Engine	50%	50%
Engine Replacement with Zero-tailpipe Emission Power Source	60%	40%
Certified Remanufacture Systems	100%	0%
Highway Idle Reduction Technologies when combined with new or previously installed exhaust after-treatment retrofit	100%	0%
Highway Idle Reduction Technologies without new exhaust after-treatment retrofit	25%	75%
Locomotive Idle Reduction Technologies	40%	60%
Marine Shore Connection Systems	25%	75%
Electrified Parking Space Technologies	30%	70%
Exhaust After-treatment Retrofits	100%	0%
Engine Upgrade Retrofits	100%	0%
Hybrid Retrofit Systems	100%	0%
Fuel and Additive Retrofits when combined with new retrofit, upgrade, or replacement	Cost differential between conventional diesel fuel	Cost of conventional diesel fuel
Aerodynamics and Low Rolling Resistance Tires when combined with new exhaust after-treatment retrofit	100%	0%
Alternative Fuel Conversion	40%	60%

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

Cost sharing and matching requirements under \$200,000 for Insular Area applicants (the U.S. Virgin Islands, American Samoa, Guam and the Commonwealth of the Northern

Mariana Islands) are waived as a matter of law as authorized by the Omnibus Territories Act, 48 U.S.C. Section 1469a. Insular Area applicants with applications that will require a cost share of \$200,000 or more are advised to contact EPA to determine if cost share requirements will be waived in whole or in part. For contact information, refer to Section VII. of the RFA.

- 2. Voluntary Cost Share: Under this solicitation, voluntary cost sharing is when an applicant voluntarily proposes to legally commit to provide costs or contributions to support the project when a mandatory cost share is not required, or when the applicant proposes to provide more than the required cost share. Applicants who propose to use a voluntary cost share must include the costs or contributions for the voluntary cost share in the project budget on the SF-424. If an applicant proposes a voluntary cost share, the following apply:
 - A voluntary cost share is subject to the match provisions in the grant regulations 2 CFR Part 200 as applicable.
 - A voluntary cost share may only be met with eligible and allowable costs.
 - The recipient may not use other sources of federal funds to meet a voluntary cost share unless the statute authorizing the other federal funding provides that the federal funds may be used to meet a cost share requirement on a federal grant.

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

C. Threshold Eligibility Criteria

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

1. Application Content and Submission

- **a.** Applications must substantially comply with the application submission instructions and application content requirements set forth in Section IV. and **Appendices A and B** or else they will be rejected.
- **b.** Pages in excess of the 12 single-spaced typewritten pages limitation for the project narrative, as defined in Section IV., will not be reviewed.
- **c.** Applications must be submitted through Grants.gov as stated in Section IV. (except in the limited circumstances where another mode of submission is specifically allowed for as explained in Section IV.) on or before the application submission deadline published in

Section IV. Applicants are responsible for following the submission instructions in Section IV. to ensure that their application is timely and properly submitted.

Applications 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 application through Grants.gov because they did not timely or properly register in SAM.gov or Grants.gov will not be considered an acceptable reason to consider a late submission.

- 2. Applications must further EPA's current priorities for improving air quality, which focus on improving air quality to ensure more Americans are living and working in areas that meet high air quality standards. (See Section I.C.)
- 3. Ineligible activities: If an application is submitted that includes any ineligible tasks or activities, that portion of the application will be ineligible for funding and may, depending on the extent to which it affects the application, render the entire application ineligible for funding. For example, applications that do not include one or more of the eligible diesel vehicles, engines and equipment or eligible diesel emissions reduction solutions as defined in Sections I.B.2. through 5., are not eligible and will not be reviewed. Specific ineligible activities are identified in Sections I.B.4. through 6., and Section III.D.
- **4.** Individual applications which request EPA assistance funds above the applicable regional amounts specified in Section II.A. of this RFA are not eligible and will not be reviewed.
- **5.** Individual applications which request EPA assistance funding from more than one EPA regional office are not eligible and will not be reviewed.
- **6.** Applicants that submit more than ten applications to EPA under this solicitation, or more than three applications to one EPA region, or more than one application requests funding for the same project, will be contacted prior to EPA review of any of the applications to determine which application(s) the applicant will withdraw from the competition.
- 7. Applications that do not demonstrate compliance with the mandatory cost share requirements described in Section III.B.1. of this RFA are not eligible and will not be reviewed.

D. Funding Restrictions

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

1. Ineligible Activities and Costs: Funds awarded under this RFA shall be used only for eligible vehicles, equipment, engines, technologies, and activities defined in Sections I.B.2. through 6. of this RFA. No funds awarded under this RFA shall be used for ineligible

- vehicles, equipment, engines, technologies and activities defined in Sections I.B.2. through 6. of this RFA.
- 2. Federal Matching Funds: No funds awarded under this RFA shall be used for matching funds for other federal grants unless expressly authorized by statute. Likewise, a recipient may not use federal funds as cost share funds for projects under this RFA, including funds received under EPA's State Clean Diesel Emissions Reduction Programs and federal Supplemental Environmental Project (SEP) funds.
- **3.** Expenses Incurred Prior to the Project Period: Except for eligible pre-award costs as defined in 2 CFR 200.458 and as authorized by 2 CFR 200.309 and 2 CFR 1500.8, no funds awarded under this RFA shall be used to cover expenses incurred prior to the project period set forth in any assistance agreement funded under this RFA. Additionally, except for eligible pre-award costs as defined above, expenses incurred prior to the project period set forth in any assistance agreement funded under this RFA are not eligible as a cost share.
- **4. Emissions Testing**: No funds awarded under this RFA shall be used for emissions testing and/or air monitoring activities (including the acquisition cost of emissions testing equipment), or research and development.
- **5. Fueling Infrastructure**: No funds awarded under this RFA 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.
- **6. Mandated Measures:** Pursuant to 42 U.S.C. 16132(d)(2), no funds awarded under this RFA shall be used to fund the costs of emissions reductions that are mandated under federal law.
- **7. Leasing**: No funds awarded under this RFA shall be used for leasing vehicles, engines or equipment. If financing is necessary, the purchase must be financed with a conventional purchase loan.
- **8. Fleet Expansion:** Funding under this RFA cannot be used for the purchase of vehicles, engines, or equipment to expand a fleet. Engine, vehicle, and equipment replacement projects are eligible for funding on the condition that the following criteria are satisfied:
 - **a.** The replacement vehicle, engine, or equipment will continue to perform similar function and operation as the vehicle, engine, or equipment that is being replaced.
 - **b.** The cost of optional components or "add-ons" that significantly increase the cost of the vehicle may not be eligible for funding under the grant; the replacement vehicle should resemble the replaced vehicle in form and function.
 - **c.** The replacement vehicle, engine, or equipment will be of similar type and gross vehicle weight rating or horsepower as the vehicle, engine, or equipment being replaced.

- 1) Nonroad: Horsepower increases of more than 40 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.
- 2) Highway: The replacement vehicle must not be in a larger weight class than the existing vehicle (Class 5, 6, 7, or 8). Exceptions may be granted for vocational purposes and will require specific EPA approval prior to purchase.
- **d.** The vehicle, equipment, and/or engine being replaced must be scrapped or rendered permanently disabled within ninety (90) days of being replaced.
 - 1) If a 2010 engine model year (EMY) or newer vehicle is replaced, the 2010 EMY or newer vehicle may be retained or sold if the 2010 EMY or newer vehicle will replace a pre-2009 EMY vehicle, and the pre-2009 EMY vehicle will be scrapped. It is preferred that the scrapped unit currently operates within the same project location(s) as the 2010 EMY or newer vehicle currently operates, however alternative scenarios will be considered. All existing and replacement vehicles are subject to the funding restrictions in this section of the RFA. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior EPA approval.
 - 2) If a Tier 2 or Tier 3 locomotive, marine, or nonroad vehicle, equipment and/or engine is replaced, the units may be retained or sold if they will replace a similar, lower Tiered unit, and the lower Tiered unit will be scrapped. It is preferred that the scrapped unit currently operates within the same project location(s) as the original Tier 2 or 3 unit currently operates, however alternative scenarios will be considered. All existing and replacement equipment are subject to the funding restrictions in this section of the RFA. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior EPA approval.
 - 3) Cutting a three-inch by three-inch hole in the engine block (the part of the engine containing the cylinders) is the preferred scrapping method. Other acceptable scrappage methods may be considered and will require prior EPA approval.
 - **4)** Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrappage methods may be considered and will require prior written approval from the EPA project officer.
 - 5) Evidence of appropriate disposal is required in a final assistance agreement report submitted to EPA. Participating fleet owners must attest to the appropriate disposal in a signed scrappage statement. A sample scrappage statement may be found at www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa. The scrappage statement must include:
 - a) Vehicle owner's name and address;
 - **b)** Vehicle make, vehicle model, vehicle model year, VIN, odometer reading or usage meter reading, engine make, engine model, engine model year, engine horsepower, engine ID or serial number, as applicable;
 - c) Name, address, and signature of dismantler;
 - **d)** Date engine and/or vehicle/equipment was scrapped;
 - e) Statement attesting to scrappage of vehicle/engine as defined above;

- f) Signature of participating fleet owner.
- **g)** Digital photos as follows:
 - i. Side profile of the vehicle, prior to disabling;
 - ii. VIN tag or equipment serial number;
- **iii.** Engine label (showing serial number, engine family number, and engine model year);
- iv. Engine block, prior to hole;
- v. Engine block, after hole;
- vi. Cut frame rails or other cut structural components, as applicable;
- vii. Others, as needed.
- 6) Equipment and vehicle components that are not part of the engine or chassis may be salvaged from the unit being replaced (e.g. plow blades, shovels, seats, tires, etc.). If disabled engines, disabled vehicles, disabled equipment, or parts are to be sold, program income requirements apply.
- 7) For tire replacement projects, the original tires should be scrapped according to local or state requirements, or the tires can be salvaged for reuse or retreading. If salvaged tires are sold, program income requirements apply.
- **9. Replacement Technologies**: No funds awarded under this RFA shall be used for the purchase of engine retrofits, idle reduction technologies, low rolling resistance tires or advanced aerodynamic technologies if similar technologies have previously been installed on the truck or trailer.

IV. APPLICATION AND SUBMISSION INFORMATION

A. Project Location for Application Submission

Applicants must request funding from the EPA regional office which covers their geographic project location. The term "project location" as used in this RFA refers to the area(s) where the affected vehicles or engines operate. The geographic boundaries for each EPA regional office are defined below. For long-distance fleets, the applicant 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 application should clearly list the EPA regional office from which they are requesting funding on the cover page of the project narrative. Each application may only request funding from one EPA regional office.

The geographic boundaries for each EPA regional office are:

- Region 1 is accepting applications for projects located within Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
- Region 2 is accepting applications for projects located within New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands.

- Region 3 is accepting applications for projects located within Delaware, Maryland, Virginia, Pennsylvania, West Virginia, and the District of Columbia.
- Region 4 is accepting applications for projects located within Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
- Region 5 is accepting applications for projects located within Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.
- Region 6 is accepting applications for projects located within Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
- Region 7 is accepting applications for projects located within Iowa, Kansas, Missouri, and Nebraska.
- Region 8 is accepting applications for projects located within Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
- Region 9 is accepting applications for projects located within California, Arizona, Nevada, Hawaii, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.
- Region 10 is accepting applications 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. Limits on Number of Applications that Can be Submitted

Applicants can submit a total of ten applications overall under this solicitation. No more than three applications may be submitted to the same EPA Region. However, each application must be for a different project and must be submitted separately. An applicant cannot submit two applications that both request funding for the same project (i.e. the same vehicles or engines). If an applicant submits more than ten applications to EPA, or more than three applications to the same EPA Region, or more than one application requests funding for the same project, the applicant will be contacted prior to EPA review of any of the applications to determine which application(s) the applicant will withdraw from the competition.

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

Applicants, except as noted below, must apply electronically through <u>Grants.gov</u> 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 application materials to Grants.gov, the applicant must contact OMS-ARM-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 application materials through an alternate method.

Mailing Address:

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

Courier Address:

OGD Waivers c/o Jessica Durand Ronald Reagan Building 1300 Pennsylvania Ave., N.W. Rm # 51278 Washington, DC 20004

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

- Funding Opportunity Number (FON)
- Organization Name and Unique Entity Identifier (e.g., 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 application 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 application 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, 2019, it is

valid for any competitive or non-competitive application submission to EPA through December 31, 2019). 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, 2019 with a submission deadline of January 15, 2020, the applicant would need a new exception to submit through alternative methods beginning January 1, 2020.

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.

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

Your organization's authorized official representative (AOR) must submit your complete application electronically to EPA through <u>Grants.gov</u> (<u>www.grants.gov</u>) no later than **Tuesday**, **March 26**, **2019** by **11:59** p.m. **Eastern Time** (**ET**).

We recommend that you try to submit your application to <u>Grants.gov</u> at least **three days prior** to the deadline. It is essential to allow sufficient time to ensure that your application is properly submitted to <u>Grants.gov</u> BEFORE the due date.

Please see **Appendix A** for full Grants.gov submission instructions, including procedures to follow for applicants that encounter technical difficulties with their Grants.gov submission.

E. Content of Application Submission

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

- 1. Grant Application Forms. Please complete the forms as appropriate.
 - **a. Standard Form 424,** *Application for Federal Assistance*. 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 424A, Budget Information for Non-Construction Programs
 - c. Standard Form 424B, Assurances for Non-Construction Programs
 - **d. EPA Form 4700-4**, *Pre-Award Compliance Review Report for All Applicants Requesting Federal Financial Assistance*
 - e. EPA Form 5700-54, Key Contacts Form

- **f. Project Narrative Attachment Form** (See Section IV.E.2. below for additional information)
- **g.** Other Attachment Form, if applicable (See Section IV.E.3. through 7. below for additional information)
- 2. Project Narrative. The project narrative must explicitly describe how the proposed project meets the guidelines established in Sections I.-III. of this announcement (including the threshold eligibility criteria in Section III.C.) and must address each of the evaluation criteria set forth in Section V.A. The project narrative includes the cover page and work plan and cannot exceed a maximum of 12 single-spaced typewritten pages—excess pages will not be reviewed. Items 3. through 7. below do not count towards the 12-page limit.

The project narrative must substantially comply with the specific instructions, format and content as defined **Appendix B**. **Applicants are encouraged to use the sample format for the project narrative found at:** www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.

3. Applicant Fleet Description: The purpose of the applicant fleet description is to describe in detail the specific vehicles and engines targeted for emissions reductions as well as the diesel emissions reduction solution(s) to be implemented under the proposed project. Information provided in the applicant fleet description will be used to help determine project eligibility based the criteria in Section I.B, the funding restrictions identified in Section III.D, and for evaluation purposes as described below. Applicants are encouraged to use the sample format for the applicant fleet description found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.

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

Applicants will be scored under Section V.A, Criterion 9, Applicant Fleet Description, on the degree to which detailed information is provided within the applicant fleet

description. The information provided within the applicant fleet description should be used to estimate the anticipated emissions reductions from the project and should be consistent with the information presented in the project narrative (see **Appendix C** for additional information on calculating emissions reductions). The applicant fleet description **does not** count towards the 12-page limit of the project narrative.

- **4. Emissions Reduction Calculations:** Applicants should follow the instructions in **Appendix C** of this announcement for calculating emissions reductions. Applicants must include a printout of their Diesel Emissions Quantifier (DEQ) results spreadsheet showing DEQ results and inputs as an attachment to their application. If alternative methods are used, applicants must thoroughly describe and document their emissions reduction calculation methods in an attachment to the project narrative. This information **does not** count towards the 12-page limit of the project narrative.
- **5. Cost Share Commitment Letters**: If applicable, project partners who are providing inkind or monetary assistance must demonstrate their specific commitment to meet the proposed cost share. Letters should be addressed to the applicant organization and included as attachments to the application. Please do not ask partners to submit letters directly to EPA. This information **does not** count towards the 12-page limit of the project narrative.
- 6. Partnership Letters: If applicable, letters 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. Letters should be addressed to the applicant organization and included as attachments to the application. Please do not ask partners to submit letters directly to EPA. This information does not count towards the 12-page limit of the project narrative.
- 7. Mandated Measures Justification Supporting Information: If applicable, the application must include a clear and concise justification in Section 1 of the project narrative, for why/how the emissions reductions proposed for funding are not subject to the Restriction for Mandated Measures under this RFA. Applicants must provide sufficient detail and information to support the justification, including maintenance schedules and history, if applicable. Please see Section III.D.7 and Appendix D for more information. This supporting information should be provided as an attachment and does not count towards the 12-page limit of the project narrative.

Please refer to the application submission checklist in **Appendix E** to ensure that all required information is included in your application package.

F. Submission Date and Time

The closing date and time for submission of applications is Wednesday, February 26, 2020, at

11:59 p.m. (ET). Applications submitted after the closing date and time will not be accepted.

G. Information Sessions

EPA will host three information sessions regarding this RFA via teleconference/webinar, based on the schedule below. EPA will attempt to answer any appropriate questions in these public forums. Pre-registration is not required. Webinar links and dial-in information for the information sessions can be found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.

Sessions

Wednesday, December 11, 2019 at 1:00 p.m. (ET) Wednesday, December 18, 2019 at 3:00 p.m. (ET) Tuesday, January 14, 2020 at 3:00 p.m. (ET)

Questions and answers from these information sessions will also be posted in the questions and answers document located at www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.

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 application 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 applications 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.

I. How to Fund Projects and Partnerships

There are several ways DERA recipients may implement projects and fund project partners depending on the roles and responsibilities of each. These include direct implementation, subawards, and participant support costs. Please refer to **Appendix E** for detailed guidance on these funding options and how to correctly categorize these costs in the workplan budget.

NOTE: If you intend to name a contractor (including an individual consultant) or a subrecipient as a project partner or otherwise in your application, EPA recommends that you carefully review, and comply with, the directions contained in the "Contracts and Subawards" clause found in the "Additional Provisions for Applicants Incorporated into the Solicitation" linked above in Section IV.H.

V. APPLICATION REVIEW INFORMATION

Only eligible entities whose applications meet the threshold criteria in Section III.D. will be evaluated according to the criteria below. Applicants must explicitly address the evaluation criteria below as part of their application package submittal, following the content requirements

set forth in **Section IV.E.** and **Appendix B**. **Applicants are encouraged to use the sample format for the project narrative found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa. Each application will be rated using a point system. Applications will be evaluated based on a total of 140 points possible.**

A. Evaluation Criteria

Criteria	Points
Total Possible Points	140
 1. Project Summary and Approach: Under this criterion, EPA will evaluate applications based on the extent and quality of the applicant's project summary and overall approach. Specifically, EPA will evaluate: A. (5 points) Whether the application includes a detailed project description, including information on vehicles and technologies; roles and responsibilities, and timeline and milestones as described in Appendix B. 	15
B. (5 points) Whether the application includes a well-conceived strategy for achieving the anticipated results associated with the project.	13
C. (5 points) Whether the application 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.	
2. Project Location: Under this criterion, EPA will evaluate applications based on the project location. Specifically, whether:	
A. (10 points) Projects are located in an Ozone or PM _{2.5} nonattainment or maintenance area, as described in Section I.B.7.a.1.	
B. (5 points) Projects are located in an area where all or part of the population in the area is exposed to diesel PM concentrations above the 80th percentile for diesel PM, as described in Section I.B.7.a.2.	20
C. (5 points) Projects target vehicles located at, or that service, goods movement facilities such as: ports, airports, rail yards, terminals, or distribution centers, as described in Section I.B.7.b.	
Partial points may be awarded for sub-factors A, B and C under this criterion depending on how much of the project occurs in the priority areas.	
3. Benefits to the Community: Under this criterion, EPA will evaluate applications based on the quality and extent to which the application demonstrates how the proposed project will address the needs and concerns of affected communities, especially any communities or populations that have faced or are facing environmental justice concerns (as defined in Section I.B.7.c.).	5

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- C. (5 points) The extent and quality to which the applicant identifies and quantifies other expected project outputs and outcomes, including those identified in Section I.C.2. and 3.
- **D.** (5 points) The performance measures proposed by the applicant and how they will be used to help track and measure the applicant's progress towards achieving the expected outputs and outcomes as described in Section I.C.4.
- **E.** (**5 points**) The effectiveness of the applicant's plan for tracking and measuring its progress toward achieving the expected project outputs and outcomes as described in Section I.C.4.
- **7. Programmatic Capability and Past Performance:** Under this criterion, EPA will evaluate applicants based on their ability to successfully complete and manage the proposed project considering their:
- **A.** (**5 points**) Past performance in successfully completing and managing the assistance agreements identified in the project narrative as described in Section 7 of Appendix B.
- **B.** (5 points) History of meeting the reporting requirements under the assistance agreements identified in the project narrative as described in Section 7 of Appendix B, 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.
- **C.** (**5 points**) Organizational experience and plan for timely and successfully achieving the objectives of the proposed project.

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. An applicant submitting more than one application must ensure the applicant has the staff and resources to implement all proposed projects in the event all of the proposed projects are selected for award.

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 application 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 sub-factors.

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8. Budget: Under this criterion, EPA will evaluate applicants based on: A. (5 points) Their approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner. B. (5 points) The extent and quality to which costs are reasonable to accomplish the proposed goals, objectives, and measurable environmental outcomes. C. (5 points) The extent and quality to which the proposed budget provides a detailed breakout of the approximate funding used for each major activity. 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,	15
they will account for any required or voluntary cost share/match, if applicable, and what role EPA funding will play in the overall project. 9. Applicant Fleet Description: Under this criterion, EPA will evaluate	
applicants on the extent and quality to which detailed information on the target fleet (vessel(s), vehicle(s), engine(s) and/or equipment) is provided in the applicant fleet description, as described in Section IV.E.3.	5

B. Review and Selection Process

Assistance agreements funded under this announcement will be awarded and managed by each of EPA's ten regional offices. Applications submitted through Grants.gov will be distributed by EPA's Office of Air and Radiation to the appropriate EPA regional office for review. Applications will be reviewed by regional review panels and assistance agreements funded under this announcement will be awarded and managed by each of EPA's ten regional offices.

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

Preliminary funding recommendations will be provided to the EPA regional approving or selection officials based on these reviews and rankings.

C. Other Factors

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

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

D. Additional Provisions for Applicants Incorporated Into the Solicitation

Additional provisions that apply to this solicitation and/or awards made under this solicitation including the clause on Reporting and Use of Information Concerning Recipient Integrity and Performance can be found at 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 applications 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.

VI. AWARD ADMINISTRATION INFORMATION

A. Award Notices

Following evaluation of applications, 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 May 30, 2020. The notification will be sent to the original signer of the application or the project contact listed in the application. This notification, which informs the applicant that its application has been selected and is being recommended for award is not an authorization to begin work. The official notification of an award will be made by the applicable Regional Grants Management Office.

Applicants are cautioned that only a grants officer is authorized to bind the government to the expenditure of funds; selection does not guarantee an award will be made. For example, statutory authorization, funding or other issues discovered during the award process may affect the ability of EPA to make an award to the applicant. The award notice, signed by the EPA grants officer, is the authorizing document and will be provided through electronic 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 May 30, 2020. The notification will be sent to the original signer of the SF-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.

C. Reporting Requirement

Quarterly progress reports and a detailed final report will be required. Quarterly reports summarizing technical progress, progress made on achieving the outputs and outcomes detailed in the project workplan (including any project sustainability commitments defined in Section I.B.7.e. of the RFA), planned activities for the next quarter and a summary of quarterly and cumulative expenditures are required. Quarterly reports should include an up to date fleet description and efforts should be made to track, measure and report the actual vehicle miles traveled, hours of use/operation, and fuel use for all vehicles and equipment involved in the project. Quarterly reports may contain signed eligibility statements, signed scrappage statements, and BAT analysis submitted to EPA for approval.

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, progress made on achieving the outputs and outcomes detailed in the project workplan (including any project sustainability commitments defined in Section I.B.7.e. of the RFA), environmental results, advances achieved and costs of the project or activity. The final report must include a final fleet description and efforts should be made to track, measure and report the actual vehicle miles traveled, hours of use/operation, and fuel use for all vehicles and equipment involved in the project. The final report must include all signed eligibility statements, signed scrappage statements, and documented EPA approval of BAT analysis. In addition, the final report shall discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational or technical obstacles to implementing a similar project elsewhere. 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), which can be found at <u>Grant Competition Dispute Resolution Procedures</u>. Copies of these procedures may also be requested by contacting the person listed in Section VII. Note, the Federal Register notice references regulations at 40 CFR Parts 30 and 31 that have been superseded by regulations in 2 CFR parts 200 and 1500. Notwithstanding the regulatory changes, the procedures for competition-related disputes remains unchanged from the procedures described at 70 FR 3629, 3630, as indicated in 2 CFR Part 1500, Subpart E.

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, subrecipients and contractors (including individual consultants), 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 applications 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.

F. Delays or Favorable Developments:

Recipients must notify the EPA project officer of any problems, delays, or adverse conditions which may materially impair its ability to deliver on the outputs/outcomes specified in the final approved work plan. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation. Failure to make satisfactory progress achieving the timeline and/or milestones defined in the approved workplan may result in termination of the award. Recipients must also notify the EPA project officer of any favorable developments which may enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more beneficial results than originally planned.

G. Final Approved Workplan and Modifications

Recipients must agree to carry out the project in accordance with the final approved workplan. Recipients are required to request prior written approval from EPA for any budget or program plan revisions, as defined in 2 CFR §200.308. Proposed modifications to the approved workplan, including additions, deletions, or changes in the schedule, shall be submitted in a timely manner to the EPA project officer for approval. Depending on the type of changes, a formal amendment to the award may be necessary. Major project modifications which include changes to the approved types and number of affected vehicles, engines, or equipment, or the approved types of emission reduction technologies to be implemented, or to the approved project location(s) may not be allowed.

H. Equipment Use, Management, and Disposition

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

I. Combining Proposals into One Award

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

VII. AGENCY CONTACTS

For further information, contact:

U.S. Environmental Protection Agency ATTN: Faye Swift, DERA Grants and Policy Team Leader OAR, Office of Transportation and Air Quality WJ Clinton Building North 1200 Pennsylvania Ave., NW (6406A) Washington, DC 20460

Phone: (202) 343-9147 Email: swift.faye@epa.gov

All applicants are encouraged to review the questions and answers document posted at www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa for further clarification of this RFA. EPA will respond to additional questions from individual applicants regarding threshold eligibility criteria, administrative issues related to the submission of the application, and requests for clarification about any of the language or provisions in the announcement through the questions and answers document.

Applicants may email written questions to: cleandiesel@epa.gov. Please type "RFA Question" in the subject line of your email. All questions submitted via email by 4:00 p.m. ET each Friday during the RFA open period will be answered and posted in the FAQ document the following week. The deadline for submitting questions via email is Friday, February 14, 2020 at 4:00 p.m. ET. The final posting of the questions and answers document will be Wednesday, February 19, 2020 at 4:00 p.m. ET.

APPENDIX A – Grants.gov Application 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 Unique Entity Identifier (e.g. 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 <u>Grants.gov</u> and whose Unique Entity Identifier (e.g., 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 <u>Grants.gov</u> 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 <u>Grants.gov</u> and then click on "Search Grants" at the top of the page and enter the Funding Opportunity Number, EPA-OAR-OTAQ-20-02, or the CFDA number, CFDA 66.039, in the appropriate field and click the Search button.

Please Note: All applications must now be submitted through Grants.gov using the "Workspace" feature. Information on the Workspace feature can be found at the <u>Grants.gov Workspace</u> <u>Overview Page</u>.

Application Submission Deadline: Your organization's AOR must submit your complete application package electronically to EPA through <u>Grants.gov</u> no later than **Wednesday**, **February 26, 2020, at 11:59 p.m. (ET)**. Please allow for enough time to successfully submit your application 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 accessed using the instructions above.

Application Materials

The following forms and documents are required under this announcement, as described in Section IV.C and Appendix B of the RFA:

Mandatory Documents:

- Application for Federal Assistance (SF-424)
- Budget Information for Non-Construction Programs (SF-424A)
- Assurances for Non-Construction Programs (SF-424B)
- EPA Pre-award Compliance Review Report Form 4700-4
- EPA Key Contacts Form 5700-54
- Project Narrative, including Budget Detail (Project Narrative Attachment Form)
- Applicant Fleet Description (Other Attachments Form)
- Emissions Reduction Calculations (Other Attachments Form)

Optional Documents:

- Use the Other Attachments Form for the following optional documents:
 - Cost Share Commitment Letters
 - Partnership Letters
 - o Mandatory Measures Justification Supporting Information
 - Resumes

The "Other Attachments Form" is listed under mandatory documents but should be used to attach both mandatory documents as well as any optional documents. 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 5 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 <u>Grants.gov</u> 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 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 <u>Grants.gov</u> 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. It is essential to allow sufficient time to ensure that your application is submitted to Grants.gov BEFORE the due date identified in Section IV.** The 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 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 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 or relevant 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 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 <u>Grants.gov</u>, it is essential to call 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 representative by calling 606-545-5035. **Be** *sure* **to obtain a case number from Grants.gov**. If the problems stem from unforeseen exigent circumstances unrelated to 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 due to electronic submission system issues or unforeseen exigent circumstances, and you have already attempted to resolve the issue by contacting Grants.gov, 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 case number as well as the entire application package in PDF format as an attachment.
- c. Grants.gov rejection of the application package: If a notification is received from <u>Grants.gov</u> stating that the application has been rejected for reasons other than late submittal promptly send an email to <u>swift.faye@epa.gov</u> 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 and attach the entire application in PDF format.

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

APPENDIX B – Project Narrative Instructions, Format, and Content

Instructions: The project narrative must substantially comply with the instructions, format and content defined below. It must also address the evaluation criteria in Section V.A. of the RFA.

The project narrative, including the cover page (which is recommended not to exceed one page) workplan, and budget detail as described below, must not exceed a maximum of 12 single-spaced typewritten pages. Pages in excess of the 12-page limit will not be considered.

Applicants are encouraged to use the sample format for the project narrative found at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.

<u>Cover Page</u>: It is recommended that the cover page does not exceed one 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). See Sections I.B.3.a. and b, II.A., and IV.A. of the RFA for information.
- 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 RFA, explain how you are an eligible entity.
- **Budget Summary:** Summarize the information in the budget detail portion of this Project Narrative:

EPA Funding	Voluntary Cost	Mandatory Cost	Total Project
	Share	Share	Cost

- **Project Location**: Briefly describe the primary area(s) where the affected vehicles or engines operate.
- Short Project Description: Briefly describe your project using the sector(s) and corresponding target fleet type(s) from the following lists. Include the number of affected vehicles and the type of emission upgrade(s). Example descriptions: School Bus: Retrofit 40 school buses with DPFs; Construction: Replace the engines in 10 excavators with Tier 4 diesel engines; Freight: Install DPFs and bunk heaters on 20 Class 8 long-haul trucks; Port: Replace the engines in 2 ship to shore gantry cranes with grid electric power.

Sectors

- Agriculture
- Airport
- Construction
- Freight (non-port goods movement)
- Industrial (non-port material handling, other)
- Mining
- Municipal (emergency, utility)
- Port
- School Bus
- Transit (non-port)

Target Fleets

- Generator
- Locomotive (Line Haul, Passenger, Switch)
- Long Haul
- Marine (specify Auxiliary or Propulsion; specify Tugboat, Fishing Vessel, Crew/Work Boat, Ferry, Excursion, Harbor Craft, Container Ship, Cruise, or Other OGV)
- Nonroad Equipment (specify type)
- Refuse Hauler
- School Bus
- Short Haul (specify Class 5-8; specify Delivery, Drayage, Emergency, Utility, or Shuttle)
- Transit Bus
- Transport Refrigeration Unit

Workplan

Applicants must ensure that the workplan 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 the RFA.

Section 1. Project Summary and Approach

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

A. VEHICLES AND TECHNOLOGIES:

- A description of the vehicles, engines and/or equipment targeted for emissions reductions, including the project eligibility factors listed in Section I.B.4., and the ownership, usage and remaining life of the target engines as described in Section I.B.6.
- A description of all verified and/or certified technologies to be used or funded by the applicant.
- A discussion of how the applicant has considered the available/eligible technology
 options for the target fleet and has arrived at the chosen diesel emissions reduction
 solution(s).
- Applicants proposing nonroad, locomotive, or marine engine replacements must commit
 to using Tier 4 engines if Tier 4 engines with the appropriate physical and performance
 characteristics are available, as described in Section I.B.4.a. Applicants anticipating the
 use of Tier 3 or Tier 4i engines should discuss their rationale for proposing Tier 3 or Tier
 4i engine replacements.
- Applications which include engine replacements and vehicle/equipment replacements must include the applicant's plans for engine/vehicle/equipment scrappage.

- Applications which include locomotives and/or marine engines and/or stationary engines must include a clear and concise justification for why/how the proposed emissions reductions are not subject to the restriction for mandated measures under this RFA, as described in Section III.E.7. and **Appendix D**.
- B. ROLES AND RESPONSIBILITIES: A discussion of the roles and responsibilities of the Applicant organization and any other project partners, including subrecipients, beneficiaries, and/or contractors. Applicants should discuss whether they will directly implement the project or fund project partners through subgrants and/or rebates as described in **Appendix** E. Applicants should discuss whom or what organization(s) will retain ownership of any vehicles, engines and/or equipment purchased with funding from this project.
- 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

This section of the workplan should include a detailed discussion of the project location and include the following table. The term "project location" as used in this RFA refers to the area(s) where the affected vehicles or engines operate. If a single application includes vehicles operating in more than one area, this section of the work plan should indicate where the vehicles operate and the amount (%) of time the vehicles typically operate in each area.

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

Instructions for table:

- In entry #1, you must enter a county, state, city and ZIP code to indicate the "primary" place of performance. Primary place of performance can indicate the location where the majority of the affected vehicles operate, or where the affected vehicles operate a majority of the time. In other words, if you had to pick a single location to represent the project, where would it be? For port projects, primary POP will likely be the port's address.
- If applicable, enter additional places of performance in lines #2, #3, etc., following the instructions below. Broader project locations may be represented by entering "statewide" into the county column, or "countywide" into the city column. Additional rows may be added to the table as needed.
- County: Enter county name, if applicable, or "statewide."

- State: Enter the state name.
- City: Enter city name, if applicable, or "countywide."
- ZIP Code: Enter ZIP code, if applicable.
- Fleet, Type and Number of Affected Vehicles: Enter the name of the fleet (if applicable) and the type and number of affected vehicles that operate within the listed project location.
- % of Time Vehicles Spend in Area: Enter the estimated percentage of time the affected vehicles operated within the listed project location.
- Nonattainment Area: Indicate with an "X" whether the listed project location is an area of poor air quality as described in Section I.B.7.a.1.
- Air Toxic Assessment Area: Indicate with an "X" whether the listed project location in areas of poor air quality as described in Section I.B.7.a.2.
- Goods Movement: Indicate whether the affected vehicles operate at good movements facilities within the listed project location by entering the name of the specific port, airport, rail yard, terminal, or distribution center, as described in Section I.B.7.b of the RFA.

Section 3. Benefits to the Community

This section of the workplan should include a detailed discussion of how the proposed project will address the needs and concerns of affected communities, especially any communities or populations that have faced or are facing environmental justice concerns, as described in Section I.B.7.c. of the RFA.

Section 4. Community Engagement and Partnerships

This section of the workplan should include a detailed discussion of applicant's efforts and plans for engaging affected 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.7.d. of the RFA.

Section 5. Project Sustainability

This section of the workplan should include a detailed discussion of the applicant's and/or project partner's ability to promote and continue efforts to reduce emissions after EPA funding for this project has ended, as described in Section I.B.7.e of the RFA.

Section 6. 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 described in Section I.C.2. and 3. of the RFA. Specific outputs and outcomes should be included.

Anticipated Outputs and Outcomes				
Activities	Outputs	Outcomes		

Please Note: Applicants must include a printout of their Diesel Emissions Quantifier (DEQ) results spreadsheet showing results and inputs as an attachment to their application. If alternative emissions reduction calculation methods are used, applicants must thoroughly

describe and document their methods in an attachment to the project narrative. The inputs used for emissions calculations should match the information provided by the applicant in the applicant fleet description.

- 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 RFA.
- C. PERFORMANCE PLAN: In this section of the workplan applicants must describe their plan for tracking and measuring progress toward achieving the expected project outputs and outcomes, as described in Section I.C.4. of the RFA.

Section 7. Programmatic Capability and Past Performance

- A. PAST PERFORMANCE: This section of the workplan 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 workplan 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. An applicant submitting more than one application must ensure the applicant has the staff and resources to implement all proposed projects in the event all of the proposed projects are selected for award. 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.H. of the RFA.

Please Note: In evaluating applicants under the factors as described in criteria 7.A. and B. of Section V.A. of this RFA, 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 criteria 7.A. and 7.B. under Section V.A. of the RFA. 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 8. Budget Narrative and Detail

This section of the workplan 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 mandatory or voluntary cost share if applicable). Additional guidance for developing the applicant's budget is available in RAIN-2019-G02, "Interim General Budget Development Guidance for Applicants and Recipients of EPA Financial Assistance."

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, 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. Funds are subject to the regulations governing cost share 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 RFA for more detailed information on cost share.
- If a proposed cost share is to be provided by a named third-party, a letter of commitment is required.
- There are several ways DERA recipients may implement projects and fund project
 partners depending on the roles and responsibilities of each. These include direct
 implementation, subawards, and participant support costs (i.e. rebates). Please refer to
 Appendix E of this RFA for detailed guidance on these funding options and how to
 correctly categorize these costs in the workplan budget.

C. BUDGET DETAIL:

 Applicants should use the following instructions, budget object class descriptions, and example table to complete the budget detail section of the work plan, adding or deleting additional rows as necessary to accurately reflect the proposed project budget.

- Applicants must <u>itemize</u> costs related to personnel, fringe benefits, travel, equipment, installation (labor) supplies, contractual costs, other direct costs (subawards, participant support costs), indirect costs, and total costs.
- For applicants that provide a mandatory and/or voluntary cost share, the budget detail must clearly specify the amount of federal funding and the cost share amount for each category. Any form of cost share included in the budget detail must also be included on the SF-424 and SF-424A.
- For applicants proposing to implement a rebate program, the rebates are appropriately listed under the Other budget category as "Participant Support Costs." Please see
 Appendix E for more information on Participant Support Costs as well as RAIN-2018-605, "Interim EPA Guidance on Participant Support Costs."

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

Fringe Benefits – Identify the percentage used, the basis for its computation, and the types of benefits included. Fringe benefits are allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages. Fringe benefits may include, but are not limited to the cost of leave, employee insurance, pensions and unemployment benefit plans. If the applicant's fringe rate does not include the cost of leave, and the applicant intends to charge leave to the agreement, it must provide supplemental information describing its proposed method(s) for determining and equitably distributing these costs.

Travel – Specify the mileage, per diem, estimated number of trips in-state and out-of-state, number of travelers, and other costs for each type of travel. Travel may be integral to the purpose of the proposed project (e.g. inspections) or related to proposed project activities (e.g. attendance at meetings). Only include travel costs for employees in the travel category. Travel costs do not include: (1) costs for travel of contractors (including consultants), which are included in the "Contractual" category; (2) travel costs for employees of subrecipients under subawards and non-employee program participants (e.g. trainees), which are included in the "Other" category. Further, travel does not include bus rentals for group trips, which would be covered under the contractual category. Finally, if the applicant intends to use any funds for travel outside the United States, it must be specifically identified.

All proposed foreign travel must be approved by EPA's Office of International and Tribal Affairs prior to being taken.

Equipment – Identify each item to be purchased which has an estimated acquisition cost of \$5,000 or more per unit and a useful life of more than one year. Equipment also includes accessories necessary to make the equipment operational. Equipment does not include: (1) equipment planned to be leased/rented, including lease/purchase agreement; or (2) equipment service or maintenance contracts that are not included in the purchase price for the equipment. These types of proposed costs should be included in the "Other" category. Items with a unit cost of less than \$5,000 should be categorized as supplies, pursuant to 2 CFR 200.94. 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.

Note: If the applicant has written procurement procedures that define a threshold for equipment costs that is lower than \$5,000 then that threshold takes precedence.

Supplies – "Supplies" means all tangible personal property other than "equipment." The budget detail should identify categories of supplies to be procured (e.g., laboratory supplies or office supplies). Non-tangible goods and services associated with supplies, such as printing service, photocopy services, and rental costs should be included in the "Other" category.

Contractual – Identify each type of proposed contract and specify its purpose and estimated cost. Contractual services (including consultant services) are those services to be carried out by an individual or organization, other than the applicant, in the form of a procurement relationship. EPA's Subaward Policy and supplemental Frequent Questions has detailed guidance available for differentiating between contractors and subrecipients. Leased or rented goods (equipment or supplies) should be included in the "Other" category. EPA does not require applicants to identify specific contractors. The applicant should list the proposed contract activities along with a brief description of the anticipated scope of work or services to be provided, proposed duration, and proposed procurement method (competitive or non-competitive), if known. If installation costs are included in the contractual costs, labor expenses shall be itemized with the detailed number of hours charged and the hourly wage. Any proposed non-competed/sole-source contracts in excess of \$3,500 must include a justification. Note that it is unlikely that EPA will accept proposed sole source contracts for goods and services (e.g. consulting) that are widely available in the commercial market. Refer to EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements for EPA's policies on competitive procurements and encouraging the use of small and disadvantaged business enterprises.

Other – List each item in sufficient detail for EPA to determine the reasonableness and allowability of its cost. This category should include only those types of direct costs that do not fit in any of the other budget categories. Examples of costs that may be in this category are: insurance; rental/lease of equipment or supplies; equipment service or maintenance contracts; printing or photocopying; participant support costs (i.e. rebates) and subaward costs.

Subawards (e.g., subgrants) and participant support costs are each a distinct type of cost under this category. The term "subaward" means an award of financial assistance (money or property) by any legal agreement made by the recipient to an eligible subrecipient even if the agreement is referred to as a contract. Rebates, subsidies, and similar one-time, lump-sum payments to program beneficiaries for the purchase of eligible emissions control technologies and vehicle replacements are considered to be "Participant Support Costs." Please refer to **Appendix E** of this RFA for detailed guidance on funding projects and partnerships and how to correctly categorize these costs in the workplan budget, as well as <u>RAIN-2018-G05</u>, "Interim EPA Guidance on Participant Support Costs."

"Other" does not include procurement purchases, technical assistance in the form of services instead of money, or other assistance in the form of revenue sharing, loans, loan guarantees, interest subsidies, insurance, or direct appropriations. Subcontracts are not subawards and belong in the contractual category. Applicants must provide the aggregate amount they propose to issue as subaward work or participant support costs as a separate line item in the "Other" category, and a description of the types of activities to be supported. Refer to EPA's Subaward Policy and supplemental Frequent Questions for additional guidance.

Indirect Charges – If indirect charges are budgeted, indicate the approved rate and base. Indirect costs are those incurred by the grantee for a common or joint purpose that benefit more than one cost objective or project, and are not readily assignable to specific cost objectives or projects as a direct cost. 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 an application to the cognizant federal or state agency. Examples of Indirect Cost Rate calculations are shown below:

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

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

Example Budget Table

Line Item and Itemized Cost	EPA Funding	Voluntary Cost Share	Mandatory Cost Share
(1) Project Manager @ \$40/hr x 10 hrs/wk x 52 wks		\$20,800	
(1) Project Staff @ \$30/hr x 40 hrs/wk x 40 wks	\$48,000		
TOTAL PERSONNEL	\$48,000	20,800	
20% of Salary and Wages	20%(48,000)	20%(20,800)	
- Retirement, Health Benefits, FICA, SUI	\$9,600	\$4,160	
TOTAL FRINGE BENEFITS	\$9,600	\$4,160	
Mileage for PM: 100 mi/mo @ \$.17/mi x 12 mo	\$204		
Mileage for Staff: 200 mi/mo @ \$.17/mi x 12 mo	\$408		
TOTAL TRAVEL	\$612		
25 DOCs + CCV@ \$5000 per unit	\$125,000		
25 DPFs with installation kit @ \$6,000 per unit	\$150,000		
10 New Vehicles @ \$100,000 per unit (25% / 75%)	\$250,000		\$750,000
5 Electric School Bus @ \$200,000 per unit (45% / 65%)	\$450,000		\$650,000
TOTAL EQUIPMENT	\$ 975,000		\$1,400,000
100 Replacement CCV filters @ \$10 per unit	\$1,000		
TOTAL SUPPLIES	\$1,000		
Retrofit Installation Contract	\$10,000		
TOTAL CONTRACTUAL	\$14,000		\$6,000
Subgrant to School District for 10 Bus @ \$100,000 per	\$250,000		\$750,000
unit (25% / 75% cost share on buses) plus \$32,000 in personnel/admin costs	\$32,000		
Participant Support Costs for 10 Rebates for School Bus Replacement (\$100,000 per bus @ 25% / 75% cost share on buses)	\$250,000		\$750,000
TOTAL OTHER	\$532,000		\$750,000
Federal Negotiated Indirect Cost Rate = 10% (Indirect Rate x Personnel = Indirect Costs)	\$4,800	\$2,080	
TOTAL INDIRECT	\$4,800	\$2,080	
TOTAL FUNDING	\$1,585,012	\$27,040	\$2,156,000
	EPA Funding ⁷	Voluntary Cost Share ⁸	Mandatory Cost Share ⁸
TOTAL PROJECT COST ⁹		\$3,768,052	

- ⁷ EPA Funding amount must be included on the SF-424 in Section 18.a and on the SF-424A in: Column (e) under Section A Budget Summary; and Column (1) under Section B Budget Categories.
- ⁸ Voluntary and Mandatory Cost Share funds be included on the SF-424 in Section 18.b-e and on the SF424A in: Cell 5(f) under Section A Budget Summary; Columns (2), (3) and/or (4) under Section B Budget Categories; and Section C Non-Federal Resources.
- ⁹ Total Project Cost must be included on the SF-424 in Section 18.g and on the SF-424A in: Cell 5(g) under Section A Budget Summary; and Column (5), Row k under Section B Budget Categories.

Attachments (This information does not count towards the page limit):

Applicant Fleet Description: Mandatory. The application package must also contain an applicant fleet description. See Section IV.E.3. of the RFA for detailed instructions on completing the applicant fleet description. A sample format for the applicant fleet description may be downloaded at: www.epa.gov/cleandiesel/clean-diesel-national-grants#rfa.

Emission Reduction Calculations: Mandatory. Applicants should follow the instructions in **Appendix C** of the RFA for calculating emissions reductions and cost effectiveness. Applicants should include a printout of their diesel emissions quantifier (DEQ) results spreadsheet showing DEQ results and inputs as an attachment to their application. If alternative methods are used, applicants must thoroughly describe and document their methods in an attachment to the project narrative. Inputs used for emissions reduction calculations should match the information provided in the applicant fleet description.

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. Letters should be addressed to the applicant organization and included as attachments to the application. Please do not ask partners to submit letters directly to EPA.

Partnership Letters: 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. Letters should be addressed to the applicant organization and included as attachments to the application. Please do not ask partners to submit letters directly to EPA.

Mandated Measures Justification Supporting Information: If applicable, the application 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 RFA. Applicants must provide sufficient detail and information to support the justification, including maintenance schedules and history, if applicable. Please see Section III.D.7. and Appendix D for more information.

Resumes: Optional. Provide resumes or curriculum vitae for all principal investigators and any other key personnel.

APPENDIX C – Quantifying Environmental Outcomes

Diesel Emissions Reductions for Most Project Types

To estimate the anticipated emissions reductions from your project, use the Diesel Emissions Quantifier (DEQ) found at https://cfpub.epa.gov/quantifier/index.cfm?action=main.home. After running the DEQ, results may be downloaded as a spreadsheet showing DEQ results and inputs. Applicants should include a printout of their DEQ results spreadsheet showing DEQ results and inputs as an attachment to their application.

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

From the DEQ results page (example shown below), enter the annual amount reduced after upgrades, and the lifetime amount reduced after upgrades for each of the listed pollutants (NO_x , $PM_{2.5}$, HC, CO, CO_2) in Section 6.A. "Outputs and Outcomes," of your workplan.

To calculate CO₂ emissions reductions, you must input an amount for annual diesel gallons reduced (per engine), annual idling hours reduced (per vehicle), or annual hoteling hours reduced (per vehicle) when inputting technology information for the vehicle group.

Cost Effectiveness for Most Project Types

To estimate total cost effectiveness for the project, enter estimated total costs in the total project costs field on the create new project page in the DEQ. Total project costs reflect all costs related to this project, including EPA's share and any voluntary and mandatory cost shares. Total project costs entered into the DEQ should match the total project costs reflected in the budget detail and the SF 424.

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

From the DEQ results page (example shown below), enter the lifetime capital cost effectiveness for NO_x and $PM_{2.5}$, and the total project cost effectiveness for NO_x and $PM_{2.5}$ in Section 6 "Outputs and Outcomes," of your work plan.

For further instruction on using the DEQ, please refer to https://cfpub.epa.gov/quantifier/index.cfm?action=main.home. Additional assistance is available by calling the Clean Diesel Helpline at 877-NCDC-FACTS (877-623-2322) or emailing DEQhelp@epa.gov.

Emission Results and Health Benefits for Project: Sample Project

Emission Results

Health Benefits

Emission Results



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

^a Emissions from the electrical grid are not included in the results.

⁴ Cost effectiveness estimates include only the costs which you have entered.

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

Downloading Spreadsheets

Results may be downloaded as a:

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

² 1 short ton = 2000 lbs.

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

Alternative Methods

If you are unable to use the DEQ, you may use EPA's Motor Vehicle Emissions Simulator (MOVES) (www.epa.gov/moves) for calculating emissions reductions.

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

Diesel Emissions Reductions Above and Beyond any Restriction for Mandated Measures

No funds awarded under this RFA shall be used to fund the costs of emissions reductions that are mandated under federal law. See Section III.D.1 of this RFA 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, emissions reduction benefits shall only be calculated for emissions reductions implemented prior to the effective date of the applicable mandate and/or emissions reduction benefits shall only be calculated for emissions reductions that are in excess of (above and beyond) those required by the applicable mandate.

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

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

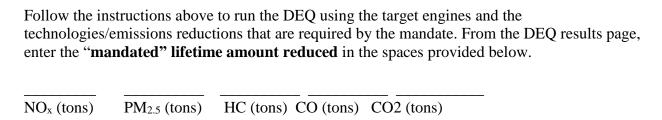
` '	$\overline{PM_{2.5}(tons/yr)}$ \overline{HC} $(tons/yr)$ \overline{CO} $(tons/yr)$ $\overline{CO2}$ $(tons/yr)$ e the annual results, not the lifetime results.
Retrofit Year =	Mandate Compliance Year =

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_{2.5}, HC, CO, CO₂) in Section 6.A. "Outputs and Outcomes," of your work plan.

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

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

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



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

$$\overline{NO_x \text{ (tons)}}$$
 $\overline{PM_{2.5} \text{ (tons)}}$ $\overline{HC \text{ (tons)}}$ $\overline{CO \text{ (tons)}}$ $\overline{CO2 \text{ (tons)}}$

Subtract the mandated values for each pollutant from the proposed project values and then enter the calculated lifetime emissions for each of the listed pollutants (NO_x , $PM_{2.5}$, HC, CO, CO_2) in Section 6.A. "Outputs and Outcomes," of your workplan.

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

Diesel Emissions Reductions for Marine Shore Power Connection Systems

EPA developed a shore power technology assessment to review the availability of shore power at ports throughout the U.S., and to characterize the technical and operational aspects of shore power systems at U.S. ports. The assessment included compiling technical information working in partnership with ports that have installed shore power. The second part of the assessment presents a new methodology for estimating emissions reductions from shore power systems for vessels docked and connected to shore power. The calculator tool provided with this report can be used to estimate how diesel emissions could be reduced through the use of shore power systems.

The tool uses vessel and activity inputs, as well as the offsetting emissions of electrical power use from shore-side power to calculate emissions reductions.

The report, titled "Shore Power Port Assessment Report,." and the calculator tool can be found here: www.epa.gov/ports-initiative/shore-power-technology-assessment-us-ports.

Step-by-step instructions to quantify emissions reductions using the recommended approach are provided in Appendix B of the Shore Power Port Assessment Report.

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

APPENDIX D – Mandated Measures Justification

No funds awarded may be used to fund emission reductions mandated by federal statute. The restriction applies when the mandate takes effect (the effective date) for any affected vehicles, engines or equipment. This restriction does not apply to a mandate in a State Implementation Plan (SIP) approved by the EPA Administrator under the Clean Air Act. Voluntary or elective emissions reduction measures shall not be considered "mandated," regardless of whether the reductions are included in the SIP.

Specifically, projects involving locomotives and marine engines are not eligible for funding if the emissions reductions are required by EPA's locomotive and marine rule, "Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder." Also, projects involving stationary engines will not be considered for funding if the emissions reductions proposed for funding are required by EPA's RICE rule, "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ).

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

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

Applicants must provide sufficient information to support the justification, including copies of maintenance records, if applicable. Supporting information should be included as an attachment to the application and does not count towards the 12-page limit.

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

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

What is sufficient justification?

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

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

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

As outlined above, and in Section III.D.1. of this RFA, certain locomotives and marine engines are exempt from the rule. This exemption may be based on the age and/or size of the locomotive or marine engines, or on the type or size and/or annual revenue of the owner/operator. In these cases, sufficient justification would include a summary of the rule applicability and an explanation of why each locomotive or marine engine is exempt from the rule. For example:

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

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

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

As outlined above, and in Section III.D.1 of the RFA, certain locomotives and marine engines may be subject to the rule requirements, but the applicant may be able to demonstrate that the emissions reduction funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule and/or emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the rule, but are in excess of (above and beyond) those required by the applicable mandate. In these cases, sufficient justification would include a summary of the rule applicability and an explanation of how the proposed emissions reductions from each locomotive or marine engine meet the criteria listed above. For example:

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

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/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment, and have determined that at this time there is one certified remanufacture kit available for this engine: [insert kit info].

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

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

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: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100094D.PDF?Dockey=P100094D.PDF
- Fact Sheet: Control of Emissions from Idling Locomotives EPA420-F-08-014, may be found at the National Service Center for Environmental Publications (www.epa.gov/nscep).
- Summary of locomotive emission standards: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA09.pdf
- Frequently Asked Questions from Marine Engine Owners and Rebuilders about EPA's Marine Remanufacture Program EPA420-F-09-003, may be found at the National Service Center for Environmental Publications (www.epa.gov/nscep).

- Summary of marine emission standards: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA0B.pdf
- Marine and Locomotive Certified Remanufacture Systems: <u>www.epa.gov/compliance-and-fuel-economy-data/engine-certification-data</u>

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

Affected Entities and Engines

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

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

Locomotives

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

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

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

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

Definitions under 40 CFR Part 92 and Part 1033

"New locomotive" or "new locomotive engine" – a locomotive or engine that has never been transferred to an ultimate purchaser or put into service; a locomotive or engine also becomes new if it is remanufactured or refurbished. Locomotives and engines that were originally manufactured before January 1, 1973 are not considered to become new when remanufactured unless they have been upgraded (as defined by the rule). Locomotives that are owned and operated by a small railroad and that have never been certified (i.e. manufactured or remanufactured into a certified configuration) are not considered to become new when remanufactured.

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

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

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

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

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

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

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

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

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

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

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

Marine Engines

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

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

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

Small vessel operators are exempt from the new standards for existing fleets. The requirements of the marine existing fleet program do not apply to owners of marine diesel engines or vessel

operators with less than \$5 million in gross annual sales revenue. This threshold includes annual sales revenue from parent companies or affiliates of the owners/operators.

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

<u>Definitions under 40 CFR Part 94 or Part 1042</u>

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

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

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

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

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

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

Replacement with a Freshly Manufactured Engine: Under the marine diesel engine program, an engine manufacturer is generally prohibited from selling a marine engine that does not meet the standards that are in effect when that engine is produced. However, manufacturers are allowed to

produce a new engine which meets an earlier tier of standards if the engine manufacturer makes a determination that an engine compliant with the current standards would not fit a particular vessel.

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

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

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

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

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

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

- 1. Engines greater than 500 HP at a major source of Hazardous Air Pollutants (HAP):
 - 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
 - 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 RFA will fall under #2, above.

Sufficient Justification

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

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

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 uses 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 – How to Fund Projects and Partnerships

There are several ways DERA recipients may implement projects and fund project partners depending on the roles and responsibilities of each. In addition to the information provided below, also refer to the "Contracts and Subawards" guidance in Section IV. of the General Solicitation Provisions found at www.epa.gov/grants/epa-solicitation-clauses.

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

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

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

Note that subawards are different than procurement contracts. Contractors such as equipment suppliers, consulting firms (including individual consultants) or other vendors provide goods and services directly to DERA grant recipients for direct implementation activities. Subrecipients only receive reimbursement for their actual direct or approved indirect costs such that they do not "profit" from the transaction and subrecipients are subject to the same Federal requirements as the pass-through entity. In other grant programs, for-profit entities participating in grant activities are typically contractors rather than subrecipients. However, DERA is one of the few grant programs where it is appropriate for pass-through entities to make subawards to for-profit organizations to purchase and install equipment for that organization's own use.

For example, if a DERA recipient directly implementing a project purchases school buses from a vendor, the appropriate funding instrument is a procurement contract and the transaction is subject to the applicable competitive procurement requirements. Referring to an individual consultant or vendor as a "partner" does not exempt the transaction from competitive procurement requirements. Alternately, for example, if a DERA recipient provides funding to a

school district for the school district to implement its own diesel emissions reduction program for its school bus fleet, the appropriate funding instrument is a subaward. In this example, the school district (subrecipient) implements their project with the DERA funds received from the pass-through entity, the school district purchases school buses from a vendor through a procurement contract, and the school districts transaction is subject to the applicable competitive procurement requirements in 2 CFR Part 200. Indicators that the transaction is a subaward include eligible and allowable costs to support the following in addition to the subrecipient vehicle and equipment purchase and installation costs:

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

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

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

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

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

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

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

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

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

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

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

Resources

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

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

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

RAIN-2018-G05, "Interim EPA Guidance on Participant Support Costs." (www.epa.gov/sites/production/files/2018-09/documents/interim_guidance_on_participant_support_costs.pdf)

APPENDIX F – Application Submission Checklist

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

☐ SF-424, Application for Federal Assistance
☐ SF-424A, Budget Information for Non-Construction Programs
☐ 424B, Assurance for Non-Construction Programs
□ EPA Form 4700-4, Pre-Award Compliance Review Report for All Applicants Requesting Federal Assistance
☐ EPA Form 5700-54, Key Contacts Form
☐ Project Narrative Attachment Form (not to exceed 12 pages)
□ Cover Page
□ Workplan
☐ 1. Project Summary and Approach
☐ 2. Project Location
☐ 3. Benefits to the Community
☐ 4. Community Engagement and Partnerships
☐ 5. Project Sustainability
☐ 6. Environmental Results – Outputs, Outcomes and Performance Measures
☐ 7. Programmatic Capability and Past Performance
☐ 8. Budget Narrative and Detail
☐ Applicant Fleet Description information (use "Other Attachments Form")
☐ Emissions Reduction Calculations (use "Other Attachments Form")
☐ Cost Share Commitment Letters, if applicable (use "Other Attachments Form")
☐ Partnership Letters, if applicable (use "Other Attachments Form")
☐ Mandated Measures Justification Supporting Information, if applicable (use "Other Attachments Form")
☐ Resumes, optional (use "Other Attachments Form")