

#### WHO WE ARE:

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GROUP

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#### **AGENDA:**

**Background on Diesel Emissions Reduction Act (DERA)** 

**Connecticut State DERA Program** 

Program Summary & Benefits

**Distinctions from VW Program** 

**Funding** 

**Application & Selection** 

**Answers to Common Questions** 

**Contacting Us** 

**Q & A Period** 



## DERA BACKGROUND & HISTORY

### Diesel Emissions Reduction Act was included in the Energy Policy Act of 2005

Public Law 109-58 – August 8, 2005

**Annual Budget Allocation by Congress** 

#### Established Several Types of Clean Diesel Funding

- State DERA: Non-competitive state allocations; state administered
- National DERA: Regional projects, EPA administered, focus on public entities (competitive)
  - EPA Clean School Bus is a subset of National DERA

2008 First Year of Funding



# CT STATE PROGRAM: SUMMARY & BENEFITS

### STATE PROGRAM GOALS & RESTRICTIONS

### Connecticut runs its program as a reimbursement program

Designed to achieve significant reductions in diesel emissions.

#### Restrictions

- Funding limits set by EPA
- No fleet expansion
- Scrappage
- Limited model year ranges
- Eligibility statement requires minimum annual usage

# STATE PROGRAM GOALS & RESTRICTIONS (CONT.)

Projects initiated prior to the execution of a contract or similar agreement are not eligible for funding

Submission of an application is not a guarantee that a proposed project will be funded

Inclusion in a municipal budget will not disqualify a project Project initiation activities that can disqualify an application include:

- initiating an RFP
- selecting a vendor
- ordering vehicles, equipment, or engine
- hiring a contractor

### STATE PROGRAM SCHEDULE

#### Solicitation opened November 9, 2023

Email <u>Patrice.Kelly@ct.gov</u> to join distribution list

Up to \$968,805 available from 2023 funds

- EPA allocation
- Volkswagen Settlement (VW) DERA Option funds as voluntary match
- EPA matching incentive

Revised Deadline: January 24, 2024, at 4:00 p.m.

Decisions anticipated by early February 2024





### DERA V. VW ELIGIBILITY

### DERA ELIGIBLE PROJECTS

Vehicle & Equipment Replacement (includes vessels & locomotives)

- No minimum EMY (formerly EMY 1996 or newer)
- Class 5-8

Repower/Engine Replacement

Engine Remanufacture/Rebuilds

Clean Alternative Fuel Conversions

EPA or CARB-Verified Retrofit Technologies

EPA SmartWay-Verified Idle Reduction Technologies

EPA-Verified Aerodynamic Technologies and Low Rolling Resistance Tires

### VW ELIGIBLE PROJECTS

Vehicle & Equipment Replacement (vessels & locomotives)

- EMY 1992 2009
- Class 4-8

Repower/Engine Replacement

- **Engine Remanufactures/Rebuilds**
- **Clean Alternative Fuel Conversions**
- **EPA or CARB-Verified Retrofit Technologies**
- **EPA SmartWay-Verified Idle Reduction Technologies**
- EPA-Verified Aerodynamic Technologies and Low Rolling Resistance Tires

Electric Vehicle (EV) chargers in a separate 2023 program



### DERA ELIGIBLE PROJECTS NOT ELIGIBLE FOR VW

Replacement of EMY 2010 or newer vehicles with zero-emission or CARB Low-NOx vehicles

Replacement or repower of nonroad construction or agricultural equipment including:

- loaders and commercial mowers
- transport refrigeration units (TRUs)
- stationary generators
- pumps

Engine remanufactures (rebuilds) of onhighway, nonroad, marine or locomotive engines

Clean alternative fuel conversions (includes EMY 2010 or newer vehicles)



# DERA ELIGIBLE PROJECTS NOT ELIGIBLE FOR VW (CONT.)

### Replacement or repower for long haul locomotives

VW funding is limited to freight switchers

### Replacement or repower of commercial vessels

 marine engine funding under the VW Program is limited to tugboats and ferries

### Idle reduction technologies, including:

- auxiliary power units on long haul trucks and school buses
- truck stop electrification
- idle reduction for locomotives
- shore power for TRUs

Retrofit technologies for diesel vehicles or equipment



### SWAPPING OPTION UNDER DERA

A 2010 EMY or newer vehicle may be replaced with a diesel equivalent if it will replace a 2009 EMY or older diesel vehicle that is scrapped. (Requires EPA approval)

#### Example:

Town A wants a new maintenance truck but doesn't have an eligible truck (EMY ≤ 2009) to scrap.

Nearby Town B has several eligible maintenance trucks in its fleet and would like to acquire a good used truck to replace one of them.

Town A proposes to sell one of its newer trucks, EMY 2010 or newer, to Town B, and replace it with a new truck under a DERA grant; in return, Town B agrees to scrap one of its eligible trucks.

Condition: New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

### DERA RESTRICTIONS

### DERA projects are limited to Class 5-8 vehicles

VW covers Class 4-8 vehicles

### DERA RESTRICTIONS

New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

Hypothetical 1:

Town A wants new school buses, but its fleet is too new to be eligible.

Town A's school bus provider has older, eligible buses assigned to Town B, which is an environmental justice (EJ) community.

Provider proposes scrapping the eligible buses in Town B, moving newer, but not new buses from Town A to Town B, and giving the new buses, purchased under the grant to Town A.

This is not generally allowed under either the DERA or VW programs.



### DERA RESTRICTIONS

### New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

#### Hypothetical 2:

Town A wants an electric school bus but cannot afford to purchase one at the 45% DERA rate.

Nearby Town B has older, eligible school buses.

Town A proposes selling a newer bus (MY 2010 or newer) to Town B and purchasing the EV bus with the combined proceeds from the sale and the 45% grant; Town B agrees to scrap an eligible bus.

This is allowed under the DERA program.

Requires DEEP to obtain prior approval from EPA.



#### **DERA BENEFIT**

### **DERA** is less competitive than VW



# ELIGIBILITY STATEMENT REQUIREMENTS FROM EPA

### EPA ELIGIBILITY REQUIREMENTS

### Ownership, Usage, & Remaining Life

- Existing vehicle must be fully operational.
- Participating fleet owner must have owned and operated vehicle during 2 years prior to upgrade.
- •Existing vehicle must have at least 3 years of remaining life at 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.

### EPA ELIGIBILITY REQUIREMENTS (CONT.)

### Usage Required During 2 Years Prior to Upgrade

- Highway Vehicle: 7,000 mi/yr
- Locomotive & Marine: 1,000 hr/yr
- Agricultural Pump: 250 hr/yr
- •All Other Nonroad Engines: 500 hr/yr

### EPA ELIGIBILITY REQUIREMENTS (CONT.)

### **Documentation Requirements:**

Participating fleet owners must attest to ownership, usage, and remaining life requirements in a signed Eligibility Statement. DEEP is requesting the documentation at the time of application; it will be submitted to EPA if the project is selected for funding. This documentation is to verify the eligible use of grant funds. The Eligibility Statement is included on page 21 of the proposal form.





### DERA REIMBURSEMENT

## DERA REIMBURSEMENT FOR VEHICLE REPLACEMENT

#### Reimbursement up to:

- •45% of the cost for replacement with electric equivalents
- •25% of the cost for replacement of locomotives, marine vessels, and nonroad vehicles and equipment with equivalents having Tier 3 or Tier 4 engines (must be Tier 2 for nonroad projects)
- •25% of the cost for replacement of Class 5-8 highway diesel trucks and buses with EPA certified 2021 EMY or newer vehicles (may include maintenance costs during warranty period)
- •50% of the cost for replacement of drayage trucks with 2017 EMY or newer trucks (may include maintenance costs during warranty period)
- •35% of the cost for replacement with 2021 EMY or newer onhighway vehicles powered by engines certified to meet CARB's Optional Low-NO $_{\rm X}$  Standards of 0.10 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO $_{\rm X}$



# DERA REIMBURSEMENT FOR ENGINE REPLACEMENT (REPOWER)

### Reimbursement up to:

- •60% of the cost for replacement with electric motors
- •40% of the cost for replacement of diesel engines on locomotives, marine vessels, and nonroad vehicles and equipment with Tier 3 or Tier 4 equivalents (must be Tier 2 for nonroad projects)
- •40% of the cost for replacement diesel engines in highway vehicles with 2021 EMY or newer engines certified to EPA emission standards
- •50% of the cost for replacement with 2021 EMY or newer engines certified to meet CARB's Optional Low-NO $_{\rm X}$  Standards of 0.10 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO $_{\rm X}$

### DERA REIMBURSEMENT

Reimbursement for Engine Remanufactures (Rebuilds): up to 100% of the cost for engine rebuilds using kits certified by EPA

Reimbursement for Clean Alternative Fuel Conversions: up to 40% of the cost for aftermarket alternative fuel conversion systems. These must be certified by either CARB or EPA OR must be approved by EPA for intermediate-age engines and otherwise eligible for sale in CT

Reimbursement for Emission Control Technologies (Retrofits): up to 100% of the cost for retrofit technologies for emission control that are verified by EPA or CARB

 Up to 60% of the cost for verified systems which convert a diesel engine to a hybrid-electric system for some nonroad and marine engines



# DERA REIMBURSEMENT FOR IDLE REDUCTION PROJECTS

### Stationary Technologies - Reimbursement up to:

- •30% of the cost for shore connections for electrified parking spaces, hybrid electric transport refrigeration units (TRUs) or electrified truck stops
- •25% of the cost for eligible marine shore power systems to allow maritime vessels to "plug into" an electrical power source instead of using diesel main or auxiliary engines while at port

# DERA REIMBURSEMENT FOR IDLE REDUCTION PROJECTS (CONT.)

### Stationary & On-Board Technologies - Reimbursement up to:

- •40% of the cost for locomotive idle reduction, stationary and on-board
- •25% of the cost for highway idle reduction technologies for long-haul Class 8 trucks and school buses (includes auxiliary power units (APUs)); up to 100% if combined with retrofit technologies.

### **EPA-Verified Aerodynamic Technologies & Low Rolling Resistance Tires:**

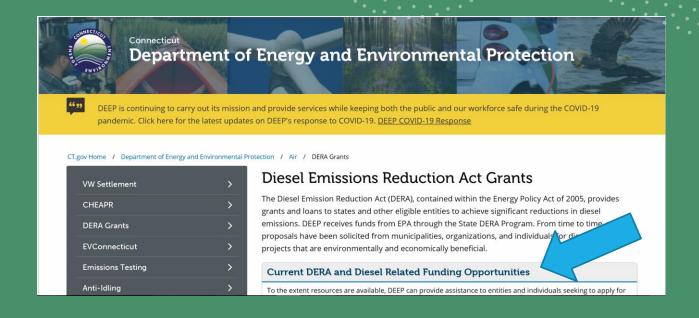
Up to 100% of the cost for aerodynamic technologies and low rolling resistance tires on long-haul, Class 8 trucks but only if combined with new exhaust aftertreatment retrofit.





### APPLICATION & SELECTION

### **APPLICATION FORM**



- Application form and instructions available at: https://portal.ct.gov/DEEP/Air/Mobile-Sources/DERA-Grants
- If applying for funds for more than 1 source category (e.g., on-road vehicles and nonroad equipment), a separate application should be used for each eligible source category project

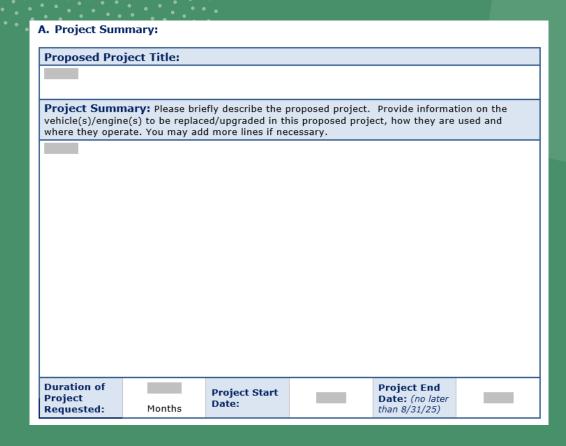
### PART I – APPLICANT INFORMATION

- Basic contact information
- Important to have an accurate and working e-mail address

Part 1: Applicant Information		
Applicant/Organization Name:		
Address:		
City:	State: Zip Code:	
Authorized Representative Name:1		
Authorized Representative Title:		
E-Mail:	Telephone:	
Additional Contact Name: (Optional) <sup>2</sup>		
E-Mail:	Telephone:	
Additional Contact Name: (Optional)		
E-Mail:	Telephone:	
Have you previously submitted a prop EV charger funding?	osal to DEEP for clean diesel or	☐ Yes ☐ No
Are you submitting additional proposition of the so, how many?	als for this incentive program?	☐ Yes: ☐ No

### PART II.A: PROJECT SUMMARY

- Provide project title and anticipated project start and end dates.
- All projects should have potential for completion by August 31, 2025.
- Provide detailed but concise description of the proposed project, including community and air quality benefits.
- Include information on use of old vehicles and areas where they operate.



• Important!! This is your opportunity to promote the energy, environmental and economic benefits of the project.

### PART II.B: PROJECT CATEGORY

- Indicate project category being applied for.
- If more than 1 category, then a separate application form should be used for each project category.
- Exception for Aerodynamic Technologies, which can only be funded in conjunction with Retrofit Technologies, and
- Exception for Highway Idle Reduction Technologies, which have higher reimbursement in combination with Retrofit Technologies

#### **B. Project Category:**

Categories Potentially Available for Funding

Replacement: Reimbursement for replacement of diesel vehicles or nonroad equipment can be made:	
<ul> <li>Up to 45% of the cost for replacement with zero-tailpipe emission power source (grid, battery, or fuel cell) (purchase and installation of charging equipment may be included),</li> </ul>	
<ul> <li>Up to 25% of the cost for replacement of locomotives, marine vessels, and non-road vehicles and equipment with Tier 3 or Tier 4 compression ignition equivalents, or spark ignition equivalents (must be Tier 2 for nonroad projects) (see Tables 2 and 3 in the 2023 Guidance for State DERA Project Proposals),</li> </ul>	
<ul> <li>Up to 25% of the cost for replacement of Class 5-8 highway diesel trucks and buses with U.S. Environmental Protection Agency (EPA) certified 2021 engine model year (EMY) or newer equivalents,</li> </ul>	
<ul> <li>Up to 50% of the cost for replacement of drayage trucks with 2017 EMY or newer trucks, and</li> </ul>	
<ul> <li>Up to 35% of the cost for replacement with 2021 EMY or newer on-highway vehicles powered by engines certified to meet the California Air Resources Board (CARB) Optional Low NO<sub>X</sub> Standards of 0.10 q/bhp-hr, 0.05 q/bhp-hr, or 0.02 q/bhp-hr NO<sub>X</sub></li> </ul>	
Repower: Reimbursement for replacement of diesel engines can be made:	
<ul> <li>Up to 60% of the cost for replacement with zero-tailpipe emission power source (grid, battery, or fuel cell) (purchase and installation of charging equipment may be included),</li> </ul>	
<ul> <li>Up to 40% of the cost for replacement of diesel engines on locomotives, marine vessels, and non-road vehicles/equipment with Tier 3 or Tier 4 compression ignition equivalents, or spark ignition equivalents (must be Tier 2 for nonroad projects),</li> </ul>	
<ul> <li>Up to 40% of the cost for replacement diesel engines in a highway vehicle with 2021 EMY or newer engines certified to U.S. Environmental Protection Agency (EPA) emission standards, and</li> </ul>	
<ul> <li>Up to 50% of the cost for replacement with 2021 EMY or newer engines certified to meet the California Air Resources Board (CARB) Optional Low NO<sub>X</sub> Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO<sub>X</sub></li> </ul>	
Certified Remanufacture (a.k.a. Engine Rebuild) Systems: Up to 100% of the cost for engine rebuilds using kits that are certified by U.S. Environmental Protection Agency (EPA).	
Clean Alternative Fuel Conversions: Up to 40% of the cost for altering existing highway diesel engines to operate on alternative fuels such as propane and natural gas by applying a certified alternative fuel conversion kit. To be eligible for funding, alternative fuel conversion systems must be certified by the U.S. Environmental Protection Agency (EPA) and/or the California Air Resources Board (CARB) or must be approved by EPA for Intermediate-Age engines. See EPA's lists of "Certified Conversion Systems for New Vehicles and Engines" and "Conversion Systems for Intermediate-Age Vehicles and Engines" and CARB's list of "Approved Alternate Fuel Retrofit Systems."	
EPA-Verified or CARB-Verified Retrofit Technologies: Reimbursement for different types of retrofit technologies can be made:	

### PART III.A – REPLACEMENT, REPOWER, REMANUFACTURE & CLEAN ALTERNATIVE FUEL CONVERSIONS

- Provide number of vehicles being replaced/repowered/rebuilt.
- Submit all required supporting documentation.
- Part VII: Fleet Information Worksheet collects information about the old vehicles and replacements (will be discussed in detail later).
- Important!! Ensure all estimates and spec sheets are legible and attached to application form.

Replacement, Repower, Engine Upgrade	and Clean Alternative Fuel C	Conversions:
Vehicle Category	Applicable	QTY
On-Road Vehicles		
Drayage Trucks		
Non-Road Equipment		
Commercial Marine (see A.1)		
Locomotives (See A.2)		

For All Replacement, Repower, Remanufacture or Clean Alternative Fuel Conversion Projects: Submit completed Part VII: Fleet Information	
For All Replacement, Repower, Remanufacture or Clean Alternative Fuel Conversion Projects: Submit signed Part VIII: EPA Eligibility Statement	
For All Replacement, Repower, Remanufacture or Clean Alternative Fuel Conversion Projects: Submit estimates or quotes from vendors and installation contractors	
Replacement of a 2010 EMY or Newer Highway Vehicle with Scrappage of a Pre- 2009 EMY Vehicle: Applicant must submit a detailed scrappage plan (DEEP must submit the plan to EPA for approval prior to funding).	
<b>Drayage Truck:</b> Applicant must provide evidence 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. If selected, the grantee will be required to establish guidelines to ensure any new truck purchased with grant funds is operated in a manner consistent with the definition of a drayage truck.	
Replacement Highway, Nonroad, Marine and Locomotive Projects: Applicant must provide evidence that replacement engines are certified to EPA and/or CARB emission standards (not applicable for zero tailpipe emissions engine replacements).	
<b>Nonroad Equipment:</b> The engine operating hours of two or more units may be combined to re thresholds below where two or more units will be scrapped and replaced with a single unit.	ach the
<ul> <li><u>Agricultural Pumps:</u> Applicant must provide evidence that agricultural pumps being replaced have operated at least 250 hours per year during the two years prior to upgrade.</li> </ul>	
<ul> <li>All Other Nonroad Equipment (equipment or vehicles used in construction, handling of cargo (including at a port or airport), agriculture, mining, or energy production (including stationary generators)): Applicants must provide evidence that equipment has operated at least 500 hours per year during the two years prior to upgrade.</li> <li>Exception: If a recipient can demonstrate that a certified nonroad engine/vehicle is being used in a predominately highway application, vehicle mileage as defined in "highway usage" may be used for application eligibility purposes. If selected for award, EPA will review and approve eligibility on a case-by-case basis.</li> </ul>	
<ul> <li><u>Stationary Engines:</u> Applications which include stationary engines must provide a clear and concise justification for why/how the proposed emissions reduction is not subject to the restriction for mandated measures.<sup>3</sup></li> </ul>	

### PART III.A.1 – COMMERCIAL MARINE VESSELS

- Select the type of replacement/repower/remanufacture
- Provide number of vessels being replaced, repowered or rebuilt and number of propulsion engines and auxiliary engines being replaced/repowered/rebuilt
- Submit all required supporting documentation
- For EPA records, provide MMSI/AIS Identification number if available.
- MMSI/AIS Identifier: Applicant must provide the Maritime Mobile Service Identity (MMSI) number(s)/Automatic Identification System (AIS) identifier(s) of the marine vessel(s): Important!! Provide documentation that vessels have been operating 1,000 or more hours per year in the 2 years preceding application. (e.g., operating log)

A.1. Replacement, Repower or Certified Remanufacture for Marine Vessels:

Indicate the quantity of marine vessels or engines being replaced, repowered, or

Applicant must provide evidence that engines have operated at least 1,000 hours per year during the two years prior to upgrade. (Engine hours may be combined to reach

the 1,000-hour threshold where two engines will be scrapped and replaced with a single

Tier 4 Replacement: Recipients replacing marine engines must demonstrate that their projects commit to using Tier 4 engines, if Tier 4 engines with the appropriate physical and performance characteristics are available. Recipients anticipating the use of Tier 3 engines should provide their rationale for proposing lower tiered engine replacements. (DEEP must

EPA Verified Engine Remanufactures: Applicants must provide evidence that the

chosen technology is EPA certified at the time of acquisition. The list of certified remanufacture systems are available at Annual Certification Data for Vehicles, Engines, and Equipment and additional information on remanufacture systems is available at EPA's Marine Remanufacturing Program: Maintaining Compliance when Rebuilding

Submit the following supporting documentation for the Marine

Replacement/Repower/Remanufacture Project:

submit the plan to EPA for approval prior to funding).

Completed Part VII: Fleet Information

Category 1 and 2 Marine Diesel Engines.

Vessels

Number of

**Propulsion Engines** 

remanufactured.

Vehicle Category

Marine Replacements Marine Repowers

Engine Remanufactures (Rebuilds)

### PART III.A.2 – LOCOMOTIVES

- Provide number of locomotives and number of propulsion engines & generator sets being replaced/repowered/rebuilt
- Only pre-Tier 4 locomotives are eligible
- Select the type of replacement/repower/remanufact ure
- Submit all required supporting documentation.
- Important!! Provide documentation that locomotive has been operating 1,000 or more hours per year in the 2 years preceding application. (e.g., operating log)

Vehicle Category	Number of Locomotives	Number of Propulsion Engines	Number of 6 Sets	
Locomotive Replacements				
Locomotive Repowers				
Engine Remanufactures (Rebuilds)				
Type of Replacement/Repower/Rem- Locomotive is being replaced with a n emissions (including generator sets) lo locomotives must be certified by EPA a	ew diesel-fueled, ocomotive. New	alternate-fueled or zero diesel-fueled or alternat	e-fueled	
Locomotive is being <u>repowered</u> with ne emissions engine(s) (including general engine(s) must be certified to EPA and	ew diesel-fueled, tor sets). New di	alternate-fueled, or zer esel-fueled or alternate	o tailpipe	
Locomotive engine is being <u>remanufactors</u> the time of acquisition.	tured with systen	ns for locomotives certif	fied by EDA at	
and anno or acquisition.			led by LFA at	
·	umentation for	the Locomotives cate		
·	otive has been op	'	gory:	
Submit the following supporting doc	otive has been op rade.	'	gory:	
Submit the following supporting doc Provide documentation that the locom year during the two years prior to upg	otive has been op rade. on ecing locomotive is if Tier 4 engine ble. Recipients ar osing lower tiered	perating 1,000 or more engines must demonstr s with the appropriate participating the use of Tie	gory: hours per ate that their physical and er 3 engines	

# PART III.B: – VERIFIED RETROFIT TECHNOLOGIES

- Verified Retrofit Technologies, a.k.a. Emission Control Technologies, can be fully covered
- Retrofits include:
  - diesel oxidation catalysts (DOCs)
  - diesel particulate filters (DPFs)
  - closed crankcase ventilation (CCV) filtration systems
  - selective catalytic reduction systems (SCRs)
- Provide evidence that technology is EPA or CARB verified.
- Submit all required supporting documentation.

### **B. Verified Retrofit Technologies:**

Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include engine exhaust after-treatment technologies, such as diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), closed crankcase ventilation (CCV) filtration systems, and selective catalytic reduction systems (SCRs).

For All Verified Retrofit Technologies: Applicants must provide evidence that the chosen technology is EPA or CARB verified at the time of acquisition.	
Completed Part VII: Fleet Information	

# III.C – IDLE REDUCTION TECHNOLOGIES

## Idle reduction technologies

- reduce unnecessary idling of diesel vehicles/equipment
- and/or provide services (such as heat, air conditioning, and/or electricity)
   while the vehicle is temporarily parked or stationary.

## Technology categories include:

- auxiliary power units (APUs) and generator sets,
- battery air conditioning systems,
- thermal storage systems,
- electrified parking spaces (truck stop electrification),
- fuel-operated heaters,
- shore connection systems for locomotives, and marine vessels, and
- automatic shutdown/start-up systems for locomotives.

# PART III.C.1 – STATIONARY IDLE REDUCTION

# TECHNOLOGIES

## **C.1.a.** Marine Shore Power Systems:

- Provide address of proposed installation
- Indicate that system will comply with international standards
- Indicate that system has the required capacity for >1,000 MWhours per year.
- Submit all required supporting documentation

### C.1. Stationary Idle Reduction Technologies C.1.a. Marine Shore Power Systems: May support new installations, or expansions of existing shore power systems. Eligible costs include the purchase and installation of the shore side equipment and certain equipment required for power delivery directly related to the new equipment such as design and engineering, cables, cable management systems, shore power coupler systems, distribution control systems, grounding switches, service breakers, capacitor banks, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. Address of Proposed Installation: Provide name of facility, street address, street intersection and/or latitude/longitude and city Number of existing shore power units at this Number of new shore power units proposed: Marine shore power system will comply with international shore power design standards (IEC/ISO/IEEE 80005-1:2019/ AMD 1:2022 High Voltage Shore Connection Systems or the I IEC/ISO/IEEE 80005-1:2019/AMD 1:2022 Low Voltage Shore Connection Systems) and will be supplied with power sourced from the local utility grid.

Submit the following supporting documentation for the Marine Shore Power Proposal:

Provide documentation demonstrating that applicant has site control <sup>7</sup> over the proposed infrastructure site.	
Demonstrate that the proposed system has the capacity, demand, and commitment to be utilized for more than 1,000 megawatt-hours per year. Smaller projects will be considered if the recipient can demonstrate cost effectiveness.	
If the project application is selected for funding, submit the final design of the marine shore power connection system for EPA approval prior to purchase and installation. (Requirements for the final design will be provided.)	

 Important!! Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

# PART III.C.1 – STATIONARY IDLE REDUCTION TECHNOLOGIES (CONT.)

# C.1.b. Electrified Parking Spaces:

- Provide address of proposed installation
- Submit all required supporting documentation

### C.1.b. Electrified Parking Spaces (EPS):

Electrified parking spaces (EPS), also known as Truck Stop Electrification (TSE), operates independent of the truck's engine and allows the truck engine to be turned off as the EPS system supplies heating, cooling, and/or electrical power.

Examples of eligible EPS costs include, but are not limited to, the purchase and installation of electrical infrastructure or equipment (such as electrical panels, upgrades to existing electrical panels or electrical service, transformers, and wiring/conduit) to enable heating, cooling, and the use of cab power for parked trucks, or to enable the use of power for transport refrigeration units (TRUs) and auxiliary power systems at distribution centers, intermodal facilities, and other places where trucks congregate.

### Address of Proposed Installation:

Provide name of facility, street address, street intersection and/or latitude/longitude and city

Number of EPS units to be installed

Submit the following supporting documentation for the Electrified Parking Spaces category:

Provide documentation demonstrating that applicant has site control over the proposed infrastructure site.

 Important!! Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

# PART III.C.2 — HIGHWAY IDLE REDUCTION TECHNOLOGIES ON LONG-HAUL CLASS 8 TRUCKS AND SCHOOL BUSES

- Submit all required supporting documentation
- Part VII: Fleet Information
   Worksheet collects information
   about the old vehicles and
   replacements (will be discussed
   in detail later).
- If seeking 100% funding, must provide evidence of installation of new or previously installed exhaust after-treatment retrofit.

## C.2. Highway Idle Reduction Technologies on Long-Haul Class 8 Trucks and School Buses

To be eligible for 100% funding, highway idle reduction technologies must be combined on the same vehicle with either the new installation of one or more of the Verified Engine Retrofit Technologies funded under this program, or on a vehicle that has been previously retrofitted.

Eligible costs for idle reduction technologies that are installed on the vehicle can include the associated labor costs for installation of the system.

For All Idle Reduction Technology Projects: Applicants must provide evidence that the chosen technology is on <a href="EPA's SmartWay Verified Technologies">EPA's SmartWay Verified Technologies</a> list at the time of acquisition.			
Completed Part VII: Fleet Information			
For 100% Funding of Idle Reduction Technology Projects:			
<ul> <li>Applicants must include the installation of certified emissions control technology in the proposed project, or</li> </ul>			
<ul> <li>Applicants must provide evidence that a vehicle has been previously retrofitted.</li> </ul>			

# PART III.C.3 – LOCOMOTIVE IDLE REDUCTION TECHNOLOGIES

# C.3.a: Locomotive Shore Power Systems:

 Provide address of proposed installation

C.3.a. Locomotive Shore Power Systems		
Eligible costs include the purchase and installation of certain equipment required for power delivery directly related to the new equipment such as design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation.		
Address of Proposed Installation:		
Provide name of facility, street address, street intersection and/or latitude/longitude and city		
Submit the following supporting documentation for the Locomotive Shore Power Proposal:		
Provide documentation demonstrating that applicant has site control over the proposed infrastructure site.		

- Submit all required supporting documentation
- Important!! Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

# PART III.C.3 – LOCOMOTIVE IDLE REDUCTION TECHNOLOGIES

# C.3.b: Automatic Shutdown/Start-up Systems for Locomotives.

- Indicate that system is on EPA's list of eligible technologies
- Submit all required supporting documentation
- Important!! Provide documentation that locomotive has been operating 1,000 or more hours per year in the 2 years prior to upgrade. (e.g. operating log)

C.3.b Automatic Shutdown/Start-up Systems for Locomotives		L	
	Submit the following supporting documentation for each locomotive:		
Provide documentation that the locomotive has been operating 1,000 or more hours per year during the two years prior to upgrade.			
	Applicants must provide evidence that the chosen technology is on <a href="EPA's SmartWay">EPA's SmartWay</a> <a href="Verified Technologies">Verified Technologies</a> list at the time of acquisition.		
	Completed Part VII: Fleet Information		

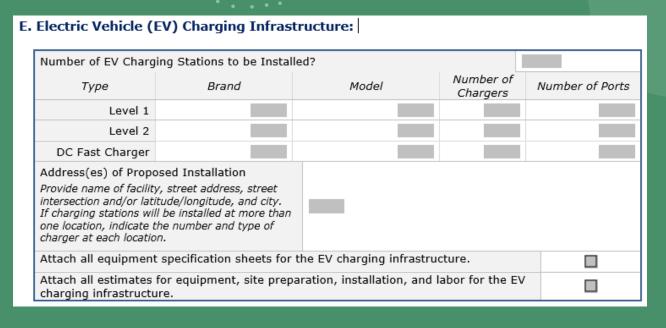
# PART III.D — EPA-VERIFIED AERODYNAMIC TECHNOLOGIES & LOW ROLLING RESISTANCE TIRES

- EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. However, aerodynamic technologies or low rolling resistance tires can be fully covered, if combined on the same vehicle with the new installation of an exhaust after-treatment retrofit funded under this program.
- Indicate that the technology is EPA-verified.
- Submit all required supporting documentation.

D. EPA-Verified Aerodynamic Technologies and Low Rolling Resistance Tires:			
	Applicants must provide evidence that the chosen technology is on EPA's verified aerodynamic technologies list and verified list for low rolling resistance new and retread tire technologies list at the time of acquisition, will be used only for the application specified on the lists, and will meet any applicable verification criteria.		
	<ul> <li>Applicants must include the installation of new exhaust after-treatment retrofit technology in the proposed project.</li> </ul>		

# PART III.E – EV CHARGING INFRASTRUCTURE

- Complete only if replacement vehicles are electric and also installing associated charging infrastructure
- Provide address of proposed location
- Indicate charger type, brand, model, number of chargers and number of outlets for the project



 Important!! Applicants must have site control of installation site and documentation should be submitted.

## PART IV.A – PROPOSED BUDGET: PROJECT COSTS

- Provide number of new vehicles/engines/equipment being purchased with make, model and year of each.
- Group similar units, if possible.
- Important!! Provide values and totals for every applicable line.
- Include all cost estimates and spec sheets with submittal to enable verification of values entered on this sheet.

Part IV. Proposed Budget: Please provide a list of the expenses for the proposed project. You may add line items as needed. Attach additional sheets if more line items are required than the space allotted below.

### A. Project Costs

Net	New Vehicle/Equipment/Engine Description				
Number of Replacement Vehicles/Engine s/Equipment	Equipment Type (e.g., Front Loader Refuse Truck)	Make	Model	Year	Cost
Drawage truels maint	tananaa (lahar 9	materials) if applie	able and requi	anta d8	
Drayage truck maint					
Installation cost of v					
	Total Cost of Vehicle, Equipment, Engine:				
EV Charging Infra vehicle <u>and</u> installin				ith an electric	
Cost of charging sta	tion(s) listed in Pa	art III.E of this for	m		
Site preparation cos	ts for EV charging	station(s) (labor	& materials)		
Installation costs of EV charging station(s) (labor & materials)					
Other (please specif	y)				
Total EV Infrastructure Cost:					
(Tota	Project Total Cost (Total Cost of Vehicle, Equipment, Engine & EV Infrastructure Cost)				
Anticipated Grant Award					
Grantee Cost Share					

# PART IV.A – PROPOSED BUDGET: CHARGING INFRASTRUCTURE COSTS

<b>EV Charging Infrastructure</b> – Complete only if you are replacing with an electric vehicle <b>and</b> installing associated charging infrastructure.	
Cost of charging station(s) listed in Part III.E of this form	
Site preparation costs for EV charging station(s) (labor & materials)	
Installation costs of EV charging station(s) (labor & materials)	
Other (please specify)	
Total EV Infrastructure Cost:	

- Provide number of units along with brand and model.
- Enter all costs including site prep, installation, and other associated costs.
- It is not unusual for site prep and installation costs to exceed cost of the actual charging equipment.
- Attach all estimates and spec sheets to application form.

# PART IV. A – PROPOSED BUDGET: TOTAL COSTS

	t Total Cost
(Total Cost of Vehicle, Equipment, Engine & EV Infrast	ructure Cost)
Anticipated Grant Award	
Grantee Cost Share	

- Anticipated DERA Grant Award should not exceed the program's maximum reimbursement percentage for each project type.
  - **Example:** Replacement of municipal owned dump truck would be eligible for a maximum of 25% of "Project Total Cost" entered in the cell above.
- Grantee Cost Share is the difference between the anticipated award and the project total.

## PART IV.B – BALANCE OF FUNDS

- Indicate the source and availability of the applicant's cost share.
- Maximum funding is not guaranteed under this program.
- Applicant must attest that funds can be secured for project.
- Sources of funds and timeline to obtain funds must be provided.
  - For gov't projects, budget approval process date is important.
- Indicate if the transaction will be a purchase or financed.

  Note: EPA no longer allows grants for leased vehicles.

В.	. Balance of Funds			
Maximum funding is not guaranteed. Be aware that funding is not guaranteed before awards are made. Note that this is a reimbursement program; applicant is responsible for all project costs prior to reimbursement.				
	Applicant attests they can secure the funds for replacement of vehicles, equipment or engines and for operation and maintenance.		Yes No	
	What is the source of these funds?			
What is the timeline for securing these funds? (For government projects: Budget approval process date)				
	How will the vehicle, equipment or engine be procured? (EPA no longer allows funding for leased vehicles.)	Purchased Financed (Convention	al Loan)	

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## PART V - EVALUATION CRITERIA

- Projects will be ranked based on a set of criteria reflecting program funding priorities.
- This is a list of preferential funding criteria and not eligibility criteria.
- Check all that apply.
- Important!! Include required supporting information for each.

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rait	v. Eva	iuation	Unite	:i ic

C**heck all that apply.** Any relevant information may be included below each item. (250-word limit)

Ranking Criteria: Please check those that apply	
Project will result in a significant reduction in emissions of carbon dioxide or other greenhouse gases. If checked, identify the quantifier used and the amount of reduction anticipated.	
Vehicles covered by this project operate primarily in one of the environmental <u>justice</u> (EJ) communities listed on the DEEP website <sup>9</sup> as Distressed Municipalities or identified as Defined Census Blocks within Other Affected Towns. If checked, identify the <u>community</u> and specify the amount of time the vehicles spend there on a <u>regular basis</u> . Vehicle(s) will operate primarily in a listed EJ community.	
Is your project located in or does the vehicle operate in one the following counties: Fairfield, New <u>Hayen</u> or Middlesex?	Fairfield New Haven Middlesex
Project is near transportation hubs or corridors. If checked, please describe below.	
Project is in an area that receives a disproportionate quantity of air pollution from diesel fleets, including ports, rail yards, terminals, construction sites, school bus depots/yards, and distribution centers. <i>If checked, please describe below.</i>	
Applicant has, or project includes, a motor-vehicle anti-idling education and outreach program. If checked, please summarize plan, and submit documentation proving existence of an anti-idling program.	
Project is consistent with the transportation section of the 2018 Comprehensive Energy Strategy for Connecticut <sup>10</sup> and the State's EV Roadmap. <sup>11</sup> If checked, please identify elements of the project that are consistent with these initiatives.	

# PART V – EVALUATION CRITERIA (CONT.)

- Projects located in the NY-NJ-CT nonattainment area
  - Important!! For any criteria referencing location, use the geographical area in which the vehicle/equipment operates; this may be different from the business address.
  - Indicate if project is located in one of the counties listed.
- Vehicle(s) will operate primarily in a listed <u>environmental justice (EJ)</u> community
  - Updated!! Towns on the DECD List of "Distressed Municipalities" and "Defined Census Blocks within Other Affected Towns" will be accepted as EJ communities.
    - Applicants must verify that operation of the vehicles is in the defined census block group which can be confirmed by checking the specific address using the 2022 Environmental Justice Communities (arcgis.com) tool.

# PART V – EVALUATION CRITERIA (CONT.)

- Project is near transportation hubs or corridors.
- Project is in an area that has borne a disproportionate share of the adverse impacts of air pollution from diesel fleets, including ports, rail yards, terminals, construction sites, school bus depots/yards, and distribution centers.
- Applicant has, or project includes, a motor-vehicle anti-idling education and outreach program.
  - If checked, summarize plan and submit documentation proving existence of anti-idling program.
- Project is consistent with the transportation section of the <u>2018</u>
   <u>Comprehensive Energy Strategy</u> for Connecticut and the <u>State's 2020 EV</u>

  Roadman

# PART V – EVALUATION CRITERIA (CONT.)

- Applicants with demonstrated experience for implementing diesel emissions reduction projects
  - Explain in detail how past experience or existing program structure can facilitate successful implementation of proposed project
- Projects with verified or leveraged cost-share exceeding the minimum requirements
  - Important!! Only check if you are willing to contribute more than the required cost share
    - E.g., if applicant is eligible for 25% of grant funding, the cost share is 75%. To receive preferential criteria, applicant would need to be willing to contribute more than 75% of a cost share to the project.
  - Explain sources of leveraged funding, amount of leveraged funding, and if funding is already secured
- Applicant is active participant in EPA's SmartWay program

## PART VI – TERMS & CONDITIONS, SUBMISSION

- Applicant must be in good standing.
- Disclosure requirement for applicants.
- Participating fleet owners must attest to ownership, usage, and remaining life requirements in a signed eligibility statement.
- Applicant attests that information is true and correct.
- If determined funds were awarded based on false statements, funds must be reimbursed.
- Reiterates understanding of the key points of the reimbursement program.

### Part VI: Terms & Conditions

Applicant is aware of the reimbursement options within <u>EPA's 2023-2024 State DERA Program Guide</u>.

Applicant must be in Good Standing.

 Connecticut corporations and limited liability entities must submit a Status Letter/ Certificate of Good Standing from the State of Connecticut Department of Revenue Services:

Department of Revenue Services
Collection and Enforcement Division-Lien Unit
Request for a Status Letter
25 Sigourney Street
Hartford, CT 06106
Revenue Services

- Applicant corporations not chartered in Connecticut must submit an equivalent Status Letter/Certificate of Good Standing.
- ii. Tax Certification. All Applicants, in order for their proposals to be considered, must not be delinquent with respect to any state or federal governmental obligation, including, but not limited to any personal or corporate income tax, property tax or fee issued by the State of Connecticut or any political subdivision thereof, or from the State wherein the Applicant's principal place of business is located. Applicants shall certify that neither they nor any business or corporation fully or partially owned by the Applicant is not delinquent on their State property taxes or fees.

The Applicant must disclose any active or pending litigation within the past three years, or any other dispute or known state or federal civil or criminal investigations related to prior grant awards, government funded projects implemented by the Applicant or other projects owned or managed by the Applicant or any of its affiliates in the United States. The Applicant shall disclose any preliminary or pending claims, complaints or matter before any federal agency, or any state's legislature or regulatory agency. Applicant must disclose if the resolution of such claim or complaint could affect the feasibility of the proposed project or the ability of the Applicant to obtain required matching funding or ability to obtain any required permits for the proposed project identified in this application.

Participating fleet owners will be required to attest to the accuracy of the vehicle data, including ownership, usage, and remaining life requirements, in a signed eligibly statement submitted in conjunction with the application process. This documentation will be submitted to EPA to verify the eligible use of grant funds.

Non-Government Vehicle/Equipment Owners must enter into a contract with the State of Connecticut and comply with state and federal contracting requirements.

Vehicle/Equipment Owners must agree to keep the replacement, repowered or retrofitted vehicle or equipment operational in Connecticut, with emission controls in place, for a minimum of three years or to replace with equipment with equal or better emissions reductions.

# PART VI – TERMS & CONDITIONS, SUBMISSION (CONT.)

- Authorized representative should be someone in the grantee's organization, not a contractor.
  - Contractor may be listed as additional point of contact.
- Important!! Sign and date form!
- Submit application to email address specified. Do not send directly to Air Bureau.

# Connecticut Department of Energy & Enviro

## PART VII - FLEET INFORMATION SHEET

Part VII: Fleet Information and Proposed Budget																							
Applicant Name:					Instructions: Please fill in all requested information below.																		
Type of Project:						Instructions: Please	TIII in all reque	stea Infon	mation below.														
	Existing E	quipment (to	be Repla	ced, Repowered	, Remanufactured, or Retrofitted)								Proposed New Equipment										
Vehicle Class <u>or</u> Type of Equipment	Engine Make	Engine Model	Engine Model Year	Vehicle Identification Number (VIN)	Engine Serial Number	Engine Family Code	Engine Tier (Non-road, marine & locomotive projects only)	Horse- power	Cylinder Displace- ment	Current Fuel Type	Annual Fuel Usage (gallons)	Annual Mileage/ Operating Hours	Vehicle Annual Idling Hours	Normal Retire- ment Year	Number of Replacement Vehicles/ Engines/ Equipment	Equipment Type (e.g., Front Loader Refuse Truck)	Make	Model	Year	New Fuel Type	New Engine MPG or GPH	New Engine Idling Hours Reduced	Unit Cost
																		Drayage truck maintenance	//=h0	4i-l-\ ifli			
																		Installation cost of vehicle,					
																	modulation cost of vehicle,				ment, Engine:	\$ -	
																		EV Charging Infrastructu installing associated chargi			re replacing v	vith an electric v	ehicle <u>and</u>
																Cost of charging station(s) listed in Part III.E of the Proposal Form							
																		Site preparation costs for E					
									Installation costs of EV charging station(s) (labor & materials)  Other (please specify):														
										Total EV Infrastructure Cost: \$													
								(Total Cost of Vehicle, Equipment, Engine & EV Infrastructure Cost) \$															
					Anticipated Grant Award Grantee Cost Share										_								
																				Grantee	COSt Silare	¥	-

- specified in the owner's manual, which is necessary to meet the warranty requirements for DPFs installed on trucks. Funding for required maintenance is available for the duration of the project period, October 1, 2023 to September 30, 2025.
- Enter all required information about existing fleet and new fleet.
- Complete this sheet if your application is for repower, replacement, rebuild, retrofit technologies, highway idle reduction technologies, or clean alternative fuel conversion of on-road vehicles, nonroad equipment, commercial marine or locomotives.

# PART VIII - ELIGIBILITY STATEMENT

- Vehicle & Engine Description
- Operational
- Ownership
- Remaining Life
- Usage (per year for 2 years prior to application)
  - On-Road Vehicle: 7,000 mi
  - Locomotive & Marine: 1,000 hr
  - Agricultural Pump: 250 hr
  - Nonroad Equipment: 500 hr
- Sign & Date



Part VIII: EPA Eligibility Statement

2023 DERA State Grants Eligibility Statement

### EPA Grant ID#: DS 00A00773-1

Vehicle make	
Vehicle model	
Vehicle model year	
VIN	
Odometer/usage meter reading	
Vehicle registration state and number	
Engine make	
Engine model	
Engine model year	
Engine horsepower	
Engine ID or serial number	
Equipment licensing state and number	

I certify that the following statements are true regarding the vehicle/engine/equipment identified above:

- 1. The existing vehicle, engine, or equipment is fully operational.
- I have owned and operated the vehicle during the two years prior to upgrade
- The existing vehicle, engine, or equipment has at least three years of remaining life at the time of upgrade
- Please check which applies with regard to use of existing equipment

The existing highway vehicle has accumulated at least 7,000 miles/year during the two years prior to upgrade.	
The existing marine vessel or locomotive has accumulated at least 1,000 hours/year during the two years prior to upgrade.	
The existing agricultural pump has operated at least 250 hours/year during the two years prior to upgrade. $ \\$	
The existing nonroad engine has operated at least 500 hours/year during the two years prior to upgrade.	

ehicle Owner's Name	
Signature	
	Date
Address	

# FORMS & SUBMISSION

- Revised deadline for submission is January 24, 2024, at 4:00 p.m.
- Application & information posted at <a href="https://www.ct.gov/deep/cwp/view.asp?a=2684&q=32">https://www.ct.gov/deep/cwp/view.asp?a=2684&q=32</a>
   <a href="https://www.ct.gov/deep/cwp/view.asp?a=2684&q=32">2100&deepNav GID=1619</a>
- Submit package via e-mail to: <u>DEEP.MobileSources@ct.gov</u> with the subject "2023 DERA Grant Application"



# POST AWARD INFORMATION

# POST-AWARD INFORMATION

- Award amounts may be less than originally requested based on number of applications received and funds available.
- Applicant can accept or deny the award if awarded amount does not satisfy proposed project.
- Projects and final documentation must be completed by August 31, 2025, to be eligible for reimbursement.
- Must submit quarterly progress reports.
- Must demonstrate payment for the project and submit required documentation, which includes scrappage, before receiving awarded funds.





POST-AWARD INFORMATION (CONT.)

- Render replaced vehicle/engine inoperable
  - Engine Replacement: cut a 3-inch hole in the engine block
  - Vehicle Replacement: in addition to above, disable the chassis by cutting the vehicle's frame rails completely in half
- Keep new equipment in operation for at least 3 years or replace with equal or better.
- If EV infrastructure installed with electric replacement or repower, and it's publicly accessible, then must comply with CGS.



# "LIGHTNING ROUND" ANSWERS TO COMMON QUESTIONS

- Our goal is to announce award decisions within 75 days of the application deadline.
- This is a competitive grant program.
   Emission reductions are one part of the criteria that applications will be ranked against. Please see application form for list of preferential criteria.
- There are no targets for \$/ton pollutant reduced but cost effectiveness is also an evaluation criteria.
- Partial awards may be issued, and maximum funding is not guaranteed.
- Projects initiated prior to the execution of a contract or similar agreement are not eligible for funding.

# "LIGHTNING ROUND" ANSWERS TO COMMON QUESTIONS (CONT.)

- If awardee decides to cancel a project,
   DEEP must be notified ASAP so that the
   funds can be made available to other
   applicants within a timeframe
   sufficient to allow completion of the
   substitute project(s).
- There are no limits on the amount of funding any one project or individual entity can receive; a grantee receiving DERA funds in one year is eligible to apply again in the next year.
- For review consistency, DEEP has chosen to use EPA's Diesel Emissions Quantifier (DEQ) to calculate emissions benefits.

## QUESTIONS?

- We will now answer general questions about the grant program.
- We may not get to every question or have an answer to every question during the webinar.
- For questions relating to a specific project or piece of equipment, please email: deep.mobilesources@ct.gov.

### **CONTACT US**

E-Mail:

deep.mobilesources@ct.gov





