

Applicant Information

Organization/ Applicant Name	FirstName	LastName	JobTitle	Address	City	State	Email Address	ZipCode	OfficePhone	OfficePhone Ext

Project 1

Information											
	Organization										
	Performing		Number of				1		Additional	Additional	
Project Name	Project	TargetFleet	Vehicles	City	County	State	Region	Funding Amount	Funding Source	Funding Amount	Public Benefit

Fleet 1 Information

					Curre	ent Vehicle Inform	ation													Ne	w Vehicle/Tech	nology Informat	ion					
Vehicle Type TargetFle	Class/ et Equipmen	Serial and/or VIN # of engine and/o vehicle	r Engine Make	Engine Model	Engine Family Name (If unregulated, then Engine Mode NA) Year	Horsepower	Displacement per Cylinder (Liters)	Current Tier Level (Nonroad)	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel Used (gal/year)	Annual Miles per vehicle (Highway)	Annual Usage Rate (Hours per engine) I (Nonroad)	Annual Idling Hours (per engine)	Year of Retrofit Action	Technology Type	Technology Make	Verified Technology Model	New Engine Family Name (Replacements/ Repowers)	New Engine Model Year (Replacements/ Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacement per Cylinder (Liters) (Replacements/ Repowers)	New Tier Level (Nonroad replacements/ Repowers/ Upgrades)	New Standard Level fo PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
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Copy and paste additional lines as necessary to capture project fleet information.

Project 2 Information

Project Name	Organization Performing Project	TargetFleet	Number of Vehicles	City	County	State	Region	Funding Amount	Additional Funding Source	Additional Funding Amount	Public Benefit

Fleet 2 Information

	Current Vehicle Information																			Ne	ew Vehicle/Tech	nology Informa	tion							
Vehicle Type	TargetFleet	Class/ er Equipment	Serial and/or VIN # of ngine and/or vehicle	Engine Make	Engine Model	Engine Family Name (If unregulated, ther NA)	n Engine Model Year	Horsepower	Displacement pe Cylinder (Liters)	Current Tier Level (Nonroad)	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel Used (gal/year)	Annual Miles per vehicle (Highway)	Annual Usage Rate (Hours per engine) (Nonroad)	Annual Idling Hours (per engine)	Year of Retrofit Action	Technology Type	Technology Make	Verified Technology Mode	New Engine Family Name (Replacements Repowers)	New Engine Model Year (Replacements/ / Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacement per Cylinder (Liters) (Replacements/ Repowers)	New Tier Leve (Nonroad replacements/ Repowers/ Upgrades)	I New Standard Level fo PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
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Project 3 Information

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	Organization										
	Performing		Number of						Additional	Additional	
roject Name	Project	TargetFleet	Vehicles	City	County	State	Region	Funding Amount	Funding Source	Funding Amount	Public Benefit

Fleet 3

information.		
Current Vehicle Information		New Vehicle/Technology Information
Vehicle Type TargetFleet Equipment vehicle Engine Make Engine Model Cyline from the Engine Model Vehicle Type TargetFleet Equipment vehicle Engine Make Engine Model NA) Year Horsepower Cylinder (t	Level for PM and Miles (Monroad) NMHC+NOx Fuel Type (gal/year) (Highway) (Nonroad) engine) Action Type	y Technology Werfield (Replacements/ Repowers) Upgrades) Repowers) Upgrades) Repowers) Upgrades) New Engine Arepowers) Upgrades) New Engine Displacements/ Repowers) Upgrades) New Ter Level Cylinder (Liters) New Standard Level for Annual Idling Technology Unit Cost Cost



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Copy and paste additional lines as necessary to capture project fleet information.

Project 4 Information

	Organization										
	Performing		Number of						Additional	Additional	
Project Name	Project	TargetFleet	Vehicles	City	County	State	Region	Funding Amount	Funding Source	Funding Amount	Public Benefit

Fleet 4 Information

					Curre	ent Vehicle Inform	nation													Ne	w Vehicle/Tech	nology Informa	tion					
Vehicle Typ	TargetFleet	Serial a VIN # Class/ engine a Equipment vehic	nd/or of Ind/or le Engine Mak	e Engine Model	Engine Family Name (If unregulated, then Engine Mode NA) Year	el Horsepower	Displacement pe Cylinder (Liters)	r Current Tier Leve (Nonroad)	Current Standard Level for PM and NOx or NMHC+NOx	i Fuel Type	Amount of Fuel Used (gal/year)	Annual Miles per vehicle (Highway)	Annual Usage Rate (Hours per engine) (Nonroad)	Annual Idling Hours (per engine)	Year of Retrofit Action	Technology Type	Technology Make	Verified Technology Mode	New Engine Family Name (Replacements/ Repowers)	New Engine Model Year (Replacements/ Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacement pe Cylinder (Liters) (Replacements/ Repowers)	New Tier Level (Nonroad replacements/ Repowers/ Upgrades)	New Standard Level fo PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
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Copy and paste additional lines as necessary to capture project fleet information.

Project 5 Information

	Organization										
	Performing	1	Number of		1	1			Additional	Additional	
Project Name	Project	TargetFleet	Vehicles	City	County	State	Region	Funding Amount	Funding Source	Funding Amount	Public Benefit

Fleet 5 Information:

							Currer	nt Vehicle Inforr	nation													Ne	ew Vehicle/Tech	nology Informa	tion					
Vehicle Type	TargetFleet	Class/ Equipment	Serial and/or VIN # of engine and/or vehicle	Engine Make	Engine Mode	Engine Family Name (If unregulated, the NA)	n Engine Model Year	Horsepower	Displacement per Cylinder (Liters)	rCurrent Tier Leve (Nonroad)	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel Used (gal/year)	Annual Miles per vehicle (Highway)	Annual Usage Rate (Hours per engine) (Nonroad)	Annual Idling Hours (per engine)	Year of Retrofit Action	Technology Type	y Technology Make	Verified Technology Mode	New Engine Family Name (Replacements Repowers)	New Engine Model Year (Replacements/ / Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacement pe Cylinder (Liters) (Replacements/ Repowers)	New Tier Leve (Nonroad replacements/ Repowers/ Upgrades)	New Standard Level 1 PM and NOx or NMHC+NOx	ior New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
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Copy and paste additional lines as necessary to capture project fleet information.

Please replicate the Project and Fleet Information Tables as necessary for additional Projects/Fleets.



Applicant Information

Organization/ Applicant Name	FirstName	LastName	JobTitle	Address	City	State	EmailAddress	ZipCode	OfficePhone	OfficePhoneE xt
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Project i inform	ation										
	Organization									Additional	
	Performing		Number of					Funding	Additional	Funding	
ProjectName	Project	TargetFleet	Vehicles	City	County	State	Region	Amount	Funding Source	Amount	Public Benefit
		Marine									

Fleet 1 Information for MARINE VESSELS ONLY

								Current Ves	sel Informatio	า													New	Vessel/Technol	logy Information						
Sector	Application	Boat Name or Other Identifier	Total Number of Engines per Vessel	Engine Type	Serial # of Engine	Engine Make	e Engine Mode	Engine Family Name (If unregulated engine, then NA)	Engine Model Year	Horsepower	Displacement per Cylinder (Liters)	Current Tier Level	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fue Used (gal/year	Annual Usag Rate (Hours per engine)	e Annual Idling Hours (per engine)	Year of Retrofit Action	Technology Type	Technology Make	Verified Technology Model	New Engine Family Name (Replacements/ Repowers)	New Engine Model Year (Replacements/ Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacement per Cylinder (Liters) (Replacements/ Repowers)	New Tier Level (Replacements/ Repowers/ Upgrades)	New Standard Level for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
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Copy and paste additional lines as necessary to capture project fleet information.

Project 2 Inform	nation										
	Organization									Additional	
	Performing		Number of					Funding	Additional	Funding	
ProjectName	Project	TargetFleet	Vehicles	City	County	State	Region	Amount	Funding Source	Amount	Public Benefit
		Marine									

Fleet 2 Information for MARINE VESSELS ONLY

							Current Vess	sel Information	1													New	Vessel/Technol	ogy Information						
Sector	Application	Total Number of Boat Name or Engines pe Other Identifier Vessel	r Engine Type	Serial # of Engine	Engine Make	Engine Mode	Engine Family Name (If unregulated engine, then I NA)	Engine Model Year	Horsepower	Displacement per Cylinder (Liters)	ter Current Tier ar Level NM	Current Standard evel for PM and NOx or MHC+NOx	Fuel Type	Amount of Fue Used (gal/year	Annual Usage Rate (Hours per engine)	Annual Idling Hours (per engine)	Year of Retrofit Action	Technology Type	Technology Make	Verified Technology Model	New Engine Family Name (Replacements/ Repowers)	New Engine Model Year (Replacements/ Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacement per Cylinder (Liters) (Replacements/ Repowers)	New Tier Level (Replacements/ Repowers/ Upgrades)	New Standard Level for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
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Marine																														
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Marine																														

Copy and paste additional lines as necessary to capture project fleet information.

Please replicate the Project and Fleet Information Tables as necessary for additional Projects/Fleets.



Applicant Fleet Description - DERA FY13 National Competition Instructions

The following instructions explain how to fill out the Fleet Description tab and the Marine Vessels tab.

Each tab is divided into three sections: Recipient Information, Project Information, and Fleet Information.

Below is an explanation of each field.

For an example of how the Applicant Fleet Description spreadsheet should be filled out, please refer to the tab labeled 'Example'.

Applicant Information should only be filled out only once.

Project Information and Fleet Information should be filled out for each separate "project" within the proposal. Separate projects are generally defined as separate subgrants to various entities, or separate, distinct target fleets within the grant or subgrants.

Fleet Information should be cumulative, and include all affected engines, vehicles, and retrofits proposed as part of the project.

Applicant Information

Organization/ Applicant Name- Enter the name of the organization applying for the grant from EPA (regardless of who actually uses the funds).

First Name- Enter the FIRST name of the contact person for the application.

- Last Name- Enter the LAST name of the contact person for the application.
- Job Title- Enter the Job Title of the contact person for the application.
- Email Address- Enter the email address of the contact person for the application.
 - Address- Enter the address of the contact person for the application.
 - City- Enter the city of the contact person for the application.
 - State- Enter the two letter postal code of the contact person for the application.
 - **Zip Code-** Enter the zip code of the contact person for the application.
- Office Phone- Enter the phone number of the contact person for the application.
- OfficePhoneExt- Enter the extension of the contact person for the application (if applicable).

Project Information

Project Name- Enter the name of the project (try to include both the Organization Name and Fleet(s)).

Organization Performing Project- Enter the name of the organization performing the project (this could be the Prime Organization/Applicant or a Subgrantee).

- Target Fleet- Select from the dropdown menu provided the target fleet to be addressed.
- Number of Vehicles- Enter the number of vehicles to be addressed.
 - **City-** Enter the city in which the project will take place.
 - County- Enter the county in which the project will take place.
 - State- Enter the two letter postal code for the state in which the project will take place.
 - Funding Amount Enter the total amount of Federal funds to be committed to the project
- Additional Funding Source- If there are to be matching funds, enter the source.
- Additional Funding Amount- Enter the amount of funds provided.
 - Public Benefit If the vehicles are part of a public fleet or benefit the public (i.e. a private school bus company contracted by a public school; drayage vehicles that serve a port; private construction equipment contracted to a public works project, etc) enter "yes", otherwise enter "no".

Fleet Information

Vehicles can be combined on one line if all the information is the same. Please see the Example tab.

Vehicle Type- Enter the vehicle type, either "On Highway" "NonRoad".

Target Fleet- Select the target fleet from the dropdown menu.

Class/Equipment- Select from the dropdown menu the Vehicle Class or type of nonroad equipment.

- Serial/VIN # Enter the Serial number or VIN number of the engine or vehicle
- Engine Make- Enter the manufacturer of the exisiting Engine.
- Engine Model- Enter the model of the exisiting Engine.

Engine Family Name- Enter the Engine Family name of the existing Engine. NOTE: unregulated engines will not have an Engine Family Name.



Applicant Fleet Description - DERA FY13 National Competition Instructions

	Engine Family Name information is optional for Idle Reduction, Aerodynamic Technology, Low Rolling Resistance Tires, and Fuels projects
Engine Model Year-	Enter the model year of this engine set.
Horsepower-	For NONROAD ONLY, Enter the average horsepower of the equipment.
Displacement per cylinder	Enter the engine displacement per cylinder in liters.
Current Tier Level-	For NONROAD REPLACEMENTS, REPOWERS AND UPGRADES ONLY, Select from the dropdown menu the Current Tier Level.
Current Standard Level -	For NONROAD AND ON-HIGHWAY REPLACEMENTS, REPOWERS AND UPGRADES ONLY, enter the current emission standard
	levels of the engine for PM and NOx or NMHC+NOx.
Current Fuel Type-	Select the type of fuel that is currently being used (prior to any clean diesel activity change).
Amount of Fuel Used-	Enter the amount of fuel used in gallons/year.
Annual Miles-	For ON-HIGHWAY ONLY, Enter the average number of vehicle miles traveled per year per vehicle.
Annual Usage Rate Hours-	For NONROAD ONLY, Enter the average number of hours the equipment is used per year.
Annual Idling Hours-	For ON-HIGHWAY ONLY, Enter the average number of hours the vehicle idles per year.
Year of Retrofit Action-	Enter the year in which the retrofit will take place (i.e., if in 2010, you're replacing a 1995 bus with a 2007 bus, the retrofit year is 2010.)
Technology Type-	Enter the type of technology to be used. Example: Diesel Particulate Filter, Replacement, Biodiesel 100
Technology Make-	Enter the make of the technology. Example: Donaldson, Caterpillar.
Verified Technology Model-	Enter the model of the technology as identified on the EPA/CARB verification lists (i.e. Johnson Matthey ACCRT, Carrier
	Transicold - Comfortpro, etc.) to confirm a verified technology was used.
	This is applicable for exhaust retrofits, upgrades, idle reduction technologies, aerodynamics and low rolling resistant tires.
	Verified Technology Model may not be known for the initial application, pending the bid process, and would be noted as TBD.
New Engine Family Name-	For REPLACEMENTS AND REPOWERS ONLY, Enter the Engine Family Name of the new engine.
New Engine Model Year-	For REPLACEMENTS AND REPOWERS ONLY, Enter the model year of the new vehicle/engine.
New Horsepower-	For NONROAD ONLY, Enter the average horsepower of the equipment.
New Displacement per cylinder	Enter the engine displacement per cylinder in liters.
New Tier Level-	For NONROAD REPLACEMENTS, REPOWERS AND UPGRADES ONLY, Select from the dropdown menu the new Tier Level.
New Standard Level-	For NONROAD AND ON-HIGHWAY REPLACEMENTS, REPOWERS AND UPGRADES ONLY, enter the new emission standard
	levels of the engine for PM and NOx or NMHC+NOx.
New Fuel Type-	Select the new type of fuel that is being used.
Annual Idling Hours reduced-	For IDLE REDUCTION STRATEGIES ONLY, Enter the average number of idling hours reduced for the engine.
Technology Unit Cost-	Enter the dollar amount of the technology per unit.
Technology Unit Installation-	Enter the cost of installing the technology per unit.

Marine Vessels

Sector-	This field will always read marine.
Application-	Select the target vessel.
Boat Name-	Enter the boat name or other identifier of the vessel
Number of Engines per Vessel-	Enter the total number of engines on the vessel including auxiliary and propulsion. The max number of engines allowed per vessel is 5.
Engine Type-	Identify which engines are propulsion and which are auxiliary.
VIN/Serial # -	For Repower and Vehicle Replacement Projects, Enter the VIN or engine Serial # for each scrapped/replaced vehicle or engine.
Engine Make-	Enter the manufacturer of the exisiting Engine.
Engine Model-	Enter the model of the exisiting Engine.
Engine Family Name-	Enter the Engine Family Name for each engine. Unregulated engines will not have an Engine Family Name.
Engine Model Year-	Enter the model year of the existing engine.
Horsepower-	Enter the horsepower of the existing engine.
Displacement per cylinder	Select from the dropdown menu the displacement per cylinder in liters.
Current Tier Level-	For REPLACEMENTS, REPOWERS AND UPGRADES ONLY, Select from the dropdown menu the Current Tier Level.
Current Standard Levels-	For REPLACEMENTS, REPOWERS AND UPGRADES ONLY, enter the current emission standard levels of the engine for PM and NOX



Applicant Fleet Description - DERA FY13 National Competition Instructions

or NMHC+NOx.

Current Fuel Type- Select the type of fuel that is currently being used (prior to any clean diesel activity change).

Amount of Fuel Used- Enter the amount of fuel used in gallons/year for the engine.

Annual Usage Rate Hours- Enter the average number of hours the engine is used per year.

Annual Idling Hours per Engine- Enter the idling hours for the engine in a given year.

Year of Retrofit Action Enter the year in which the retrofit will take place (i.e. If in 2010, you're upgrading a Tier 0 engine to Tier 1, then the retrofit year is 2010) Technology Type- Enter the type of technology to be used. Example: Diesel Oxidation Catalyst, Shore Power, Engine Repower, etc.

Technology Make- Enter the make of the technology. Example: Donaldson, Caterpillar.

Verified Technology Model- Enter the model of the technology if available (i.e. Johnson Matthey PCRT).

New Engine Family Name- For REPLACEMENTS AND REPOWERS ONLY, Enter the Engine Family name of the new engine.

New Engine Model Year- For REPLACEMENTS AND REPOWERS ONLY, Enter the model year of the new engine.

Horsepower- Enter the horsepower of the new engine.

Displacement per cylinder Select from the dropdown menu the displacement per cylinder in liters.

New Engine Tier Level- For REPLACEMENTS, REPOWERS AND UPGRADES ONLY, Select from the dropdown menu the new Tier Level.

New Standard Levels- For REPLACEMENTS, REPOWERS AND UPGRADES ONLY, enter the new emission standard levels of the engine for PM and NOx or NMHC+NOx.

New Fuel Type- Select the new type of fuel that is being used.

Annual Idling Hours reduced- For IDLE REDUCTION STRATEGIES ONLY, Enter the number of idling hours reduced as a result of this technology.

Technology Unit Cost- Enter the cost of the technology per unit.

Technology Unit Installation- Enter the cost of installing the technology per unit.

Applicant Information

Organization/ Applicant Name	FirstName	LastName	JobTitle	Address	City	State	Email Address	ZipCode	OfficePhone	OfficePhone Ex
Missouri Department of Transportation	Jeannie	Wilson	General Services Fleet Manager	P.O. Box 270	Jefferson City	мо	Jeannie.Wilso n@modot.mo	65102	573-526-1199	

Project 1

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Project Name	Organization Performing Project	TargetFleet	Number of Vehicles	City	County	State	Region	Funding Amount	Additional Funding Source	Additional Funding Amount	Public Benefit
MO Dept of	Miccouri								In-kind		
Transport Retrofits	Department of Transportation	City/County vehicle	2	St. Louis		мо	7	\$63,271	contribution from MODOT	\$2,000	yes

Fleet 1 Information:

							Curre	nt Vehicle Inform	nation													New	Vehicle/Techno	logy Inform	ation					
Vehicle Type	TargetFleet	Class/ Equipment	Serial and/or VIN # of engine and/or vehicle	Engine Make	Engine Mode	Engine Family Name (If unregulated, then I NA)	Engine Model Year	Horsepower	Displacement pe Cylinder (Liters)	Current Tier Leve (Nonroad)	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel Used (gal/year)	Annual Miles per vehicle (Highway)	Annual Usage Rate (Hours per engine) (Nonroad)	Annual Idling Hours (per engine)	Year of Retrofit Actior	Technology Type	Technology Make	Verified Technology Mode	New Engine Family Name (Replacements I Repowers)	New Engine Model Year (Replacements/ / Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacement per Cylinder (Liters) (Replacemen ts/ Repowers)	t New Tier Level (Nonroad replacements / Repowers/ Upgrades)	New Standard Level for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
On Highway	City/County vehicle	Dumpers/Tend ers	#7M001145	International	DT466	2NVXH0466ANA	2002	300	7.6		PM: 0.10, NOx: 4.0 g/bhp-hr	Diesel (ULSD), 15 ppm	8000			800	2009	Diesel Oxidation Catalyst	Donaldson	Series 6100 DOC										
On Highway	City/County vehicle	Dumpers/Tend ers	#MVA26679	International	DT466	2NVXH0466ANA	2002	300	7.6		PM: 0.10, NOx: 4.0 g/bhp-hr	Diesel (ULSD), 15 ppm	8000			800	2009	Diesel Oxidation Catalyst	Johnson Matthey	CRT3										

Project 2 Information

Project Name	Organization Performing Project	TargetFleet	Number of Vehicles	City	County	State	Region	Funding Amount	Additional Funding Source	Additional Funding Amount	Public Benefit
MO Dept of Transport Retrofits	Missouri Department of Transportation	Construction	2	St. Louis		мо	7	\$111,478	In-kind contribution from MODOT	\$2,400	yes

Fleet 2 Information:

							Curre	nt Vehicle Inform	nation													New	/ehicle/Techno	ology Inform	ation					
Vehicle Type	TargetFleet	Class/ Equipment	Serial and/or VIN # of engine and/or vehicle	Engine Make	Engine Model	Engine Family Name (If unregulated, then NA)	n Engine Model Year	Horsepower	Displacement per Cylinder (Liters)	Current Tier Level (Nonroad)	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel Used (gal/year)	Annual Miles per vehicle (Highway)	Annual Usage Rate (Hours per engine) (Nonroad)	Annual Idling Hours (per engine)	Year of Retrofit Action	Technology Type	Technology Make	Verified Technology Model	New Engine Family Name (Replacements/ I Repowers)	New Engine Model Year (Replacements/ Repowers/ Upgrades)	New Engine Horsepower (Replacements/ Repowers)	New Engine Displacemeni per Cylinder (Liters) (Replacemen ts/ Repowers)	t New Tier Level (Nonroad replacements / Repowers/ Upgrades)	New Standard Level for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
		Tractors/Load	e #8GT1429IA1			WDWXL03.3AM					PM: N/A, NOx: 9.2	Diesel (LSD),						Biodiesel									Biodiesel			
NonRoad	Construction	rs/Backhoes	0871	John Deere	DB33A	N	1998	62		Tier 1	g/kW-hr	500 ppm	14000		300		2009	(B20)									20			
NonRoad	Construction	Aerial Lifts	#BWK030919 8722	New Holland			1995	80		Tier 0		Diesel (LSD), 500 ppm	2700		250		2009	Engine Repower	New Holland			2008	300		Tier 3	PM: 0.40, NMHC+NOx: 4.7 g/kW-hr	Diesel (LSD), 500 ppm			
Copy and paste a	dditional lines as	necessary to c	apture project fle	et information.																			•							

Project 3 Information

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Project Name	Organization Performing Project	TargetFleet	Number of Vehicles	City	County	State	Region	Funding Amount	Additional Funding Source	Additional Funding Amount	Public Benefit
Marine Ferry &	XYZ Towing &								XYZ Towing &		
Tug Repower	Transportation								Transportation		
Project	Company	Marine	2	New York		NY	2	\$1,500,000	Company	\$1,000,000	yes

Fleet 3 Information for MARINE VESSELS ONLY, continued on next page

Fleet 3 Information for MARINE VESSELS ONLY

Se	ictor	Application	Boat Name or Other Identifier	Total Number of Engines per Vessel	Engine Type	Serial # of Engine	Engine Make	Engine Model	Engine Family Name (If unregulated engine, then NA)	Engine Model Year	Horsepower	Displacement pe Cylinder (Liters)	r Current Tier Level	Current Standard Level for PM and NOx or NMHC+NOx	I Fuel Type	Annual Usage Rate Amount of Fuel (Hours pu Used (gal/year) engine)	Annual Idling er Hours (per engine)	Year of Retrofit Action	Technology Type	Technology Make	Verified Technology Model	New Engine Family Name (Replacements/ Repowers)	New Engine Model Year (Replacements/ Repowers/ Upgrades)	New Engine Horsepower (Replacemen ts/ Repowers)	New Engine Displacemen t per Cylinder (Liters) (Replacemen ts/ Repowers)	New Tier Level (Replacements/ Repowers/ Upgrades)	New Standard Level for PM and NOx or NMHC+NO X	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
					propulsion	76HI-1234				1975	1950	5.0<= size <15.0	Tier 0		Diesel (LSD), 500 ppm	140000		2011	Engine Repower	EMD	8-710G7C-T2		2010			Tier 2					
					propulsion	76HI-5678				1975	1950	5.0<= size <15.0	Tier 0		Diesel (LSD), 500 ppm	140000		2011	Engine Repower	EMD	8-710G7C-T2		2010			Tier 2					
																			Vehicle/Equip												
					auxilliary					1975	200	0.9 <= size < 1.2	Tier 0		Diesel (LSD), 500 ppm	30000		2011	ment Replacement	John Deere	CKM100DM3		2010			Tier 2					
																			Vehicle/Equip										1		
		Tug Boat/ Tow			auxilliary					1975	200	0.9 <= size < 1.2	Tier 0		Diesel (LSD), 500 ppm	30000		2011	ment Replacement	John Deere	CKM100DM3		2010			Tier 2					
Ma	arine	Boat	Tug#1	4																							└──		<u> </u>	I	
					propulsion	16VF012345				1995	1100	1.2 <= size <2.5	Tier 0		Diesel (LSD), 500 ppm	150000		2011	Engine Repower	MTU	10V2000M72		2010			Tier 2					
					propulsion	16VF012346				1995	1100	1.2 <= size <2.5	Tier 0		Diesel (LSD), 500 ppm	150000		2011	Engine Repower	MTU	10V2000M72		2010			Tier 2					
																											L				
Ma	arine	Tug Boat/ Tow Boat	Tua#2	2																							<u> </u>		<u> </u>		

		DO NOT	MODIFY THIS PA	AGE A	TALL!					
Region	Model Year	States	Fleet Type							
1	1970	AK	School Bus		Vehicle Type	Vehicle Class or Type of Nonroad Equipment				
2	1971	AL	Ports and Airports		On Highway	Class 5				
3	1972	AZ	Construction		NonRoad	Class 6				
4	1973	AR	Delivery Truck			Class 7				
5	1974	СА	Transit Bus			Class 8A				
6	5 1975	со	Rail		public fleet	Class 8B				
7	1976	СТ	Refuse Hauler		yes	School Bus				
8	1977	DE	Utility Vehicle		no	Transit Bus				
9	1978	DC	Long Haul			-				
10	1979	FL	Short Haul			2-Wheel Tractors				
	1980	GA	Agriculture			ACRefrigeration				
	1981	HI	Mining		Fuel	Aerial Lifts				
	1982 ID		Marine		Diesel (ULSD), 15 ppm	Agricultural Mowers				
	1983	IL	Stationary		Diesel (LSD), 500 ppm	Agricultural Tractors				
	1984	IN	City/County vehicle		Diesel, 3,400 ppm	Airport Support Equipment				
	1985	IA	Emergency vehicle		Biodiesel 100	Balers				
	1986	KS	Other		Biodiesel 20	Bore/Drill Rigs				
	1987	KY			Biodiesel 5	Cement & Mortar Mixers				
	1988	LA			LPG	Combines				
	1989	MA			LNG	Concrete/Industrial Saws				
	1990	ME			CNG (lbs)	Cranes				
	1991	MD			CNG (ft3)	Crawler Tractors				
	1992	MH			E85	Crushing/Proc. Equipment				
	1993	MI			Emulsion	Dumpers/Tenders				
	1994	MN	Tiers			Excavators				
	1995	MS	unregulated			Ferries				
	1996	MO	Tier 0			Forklifts				
	1997	MT	Tier 1			Graders				
	1998	NE	Tier 2			Hydro Power Units				
	1999	NV	Tier 3			Irrigation Sets				
	2000	NH	Tier 4			Light Commercial Air Compressors				
	2001	NJ	Tier 0+			Light Commercial Gas Compressors				
	2002	NM	Tier 1+			Light Commercial Generator Sets				
	2003	NY	Tier 2+			Light Commercial Pressure Washer				
	2004	NC				Light Commercial Pumps				

2	2005 ND			Light Commercial Welders
2	2006 OH			Locomotives Line-Haul
2	2007 OK			Locomotives Switch
2	2008 OR			Locomotives Other
2	2009 PA			Logging Equip Fell/Bunch/Skidders
2	2010 RI			Logging Equipment Chain Saws > 6
2	2011 SC			Logging Equipment Shredders > 6
2	012 SD			Off-Highway Tractors
2	2013 TN			Off-highway Trucks
2	2014 TX			Other Agricultural Equipment
	UT			Other Construction Equipment
	VT			Other General Industrial Equipment
	VA			Other Material Handling Equipment
	WA			Pavers
	WV			Paving Equipment
	WI			Plate Compactors
	WY			Railway Maintenance
				Rollers
				Rough Terrain Forklifts
				Rubber Tire Dozers
				Rubber Tire Loaders
				Scrapers
				Signal Boards
DO NOT MODIF	<mark>IY T</mark> HIS PAC	GE AT ALL!		Skid Steer Loaders
				Sprayers
				Surfacing Equipment
				Swathers
				Sweepers/Scrubbers
				Tampers/Rammers (unused)
				Terminal Tractors
				Tillers > 6 HP
				Tractors/Loaders/Backhoes
				Trenchers
				DO NOT MODIFIY THIS PAGE AT ALL!
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			Displacement per	
Technology	Marine Application	Engine Type	cylinder	
Diesel Oxidation Catalyst	Container	auxilliary	size < 0.9	
Diesel Oxidation Catalyst + B20	Ferry/Excursion	propulsion	0.9 <= size < 1.2	
Diesel Oxidation Catalyst + B100	Tug Boat/ Tow Boat		1.2 <= size <2.5	
Diesel Oxidation Catalyst + Closed Crankcase Ventilation				
+B20	Commercial Fishing		2.5<= size <3.5	
Diesel Oxidation Catalyst + Closed Crankcase Ventilation +	Commercial Charter			
B100	Fishing		2.5<= size <5.0	
Diesel Oxidation Catalyst + Emulsion	Crew and Supply		5.0<= size <15.0	
Diesel Particulate Filter	Pilot		15.0<= size <20.0	
Diesel Oxidation Catalyst + Closed Crankcase Ventilation	Work Boat		20.0<= size <25.0	
Diesel Particulate Filter + Closed Crankcase Ventilation	Other		25.0<= size <30.0	
Diesel Oxidation Catalyst + Closed Crankcase Ventilation +				
ULSD (for Nonroad only)				
Diesel Oxidation Catalyst + ULSD (for Nonroad only)				
Partial Flow Filter				
Lean NO _x Catalyst/Diesel Particulate Filter				
Selective Catalytic Reduction				
Exhaust Gas Recirculation + Diesel Particulate Filter				
Ultra Low Sulfur Diesel (ULSD)				
Compressed Natural Gas				
Liquid Natural Gas				
Biodiesel (B20)				
Biodiesel (B100)				
Hybrid				
Hybrid Electric Replacement with Diesel Particulate Filter				
Compressed Natural Gas (CNG) Replacement				
Alternative Fuel Conversion				
Verified Engine Upgrade Kit				
Certified Remanufacture System				
Engine Repower				
Vehicle/Equipment Replacement				
Direct Fired Heater				
Auxiliary Power Unit				
Shutdown/Startup for Locomotives				
Low Rolling Resistance Tires				
Aerodynamic Improvements				
Truck Stop Electrification				

Shore Connection System (Marine)		
Shore Connection System (Locomotive)		
Generator Set		
Battery Air Conditioning System		
Thermal Storage Systems		
Engine Shutdown		
Automatic Tire Inflation		
Other Fuel Efficient Tire		
Single Wide Tires		
Aero Profile Tractor		
Cab Side Fairing		
Cab Front air dam front bumper		
Cab roof fairing		
Trailer side skirts		
Trailer Bubble		
Trailer Tails		
Integrated cab roof fairing		
Cab roof deflector		
Other		