Applicant Information

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

Project 1 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 1 Information:

Current Vehicle Information																New Vehicle/Technology Information												
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)	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/ 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 for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost

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																New Vehicle/Technology Information												
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)	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/ 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 for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost

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

Project 3 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 3 Information:

Current Vehicle Information																New Vehicle/Technology Information												
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)	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/ 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 for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost

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

Project 4
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 4
Information:

Current Vehicle Information																New Vehicle/Technology Information																
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)	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/ 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 for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost

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

Project 5
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 5
Information:

Current Vehicle Information																New Vehicle/Technology Information																
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)	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/ 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 for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost

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	OfficePhoneExt

Project 1 Information

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

Fleet 1 Information for MARINE VESSELS ONLY

Current Vessel Information																		New Vessel/Technology Information													
Sector	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 per Cylinder (Liters)	Current Tier Level	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel 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
Marine																															
Marine																															
Marine																															
Marine																															

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

Project 2 Information

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

Fleet 2 Information for MARINE VESSELS ONLY

Current Vessel Information																		New Vessel/Technology Information													
Sector	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 per Cylinder (Liters)	Current Tier Level	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel 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
Marine																															
Marine																															
Marine																															
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.

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.

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

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 Ext
Missouri Department of Transportation	Jeannie	Wilson	General Services Fleet Manager	P.O. Box 270	Jefferson City	MO	Jeannie.Wilson@modot.mo.gov	65102	573-526-1199	

Project 1 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	City/County vehicle	2	St. Louis		MO	7	$63,271	In-kind contribution from MODOT	$2,000	yes

Fleet 1 Information:

Current Vehicle Information																New Vehicle/Technology Information										
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)	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/ 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 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/Tenders	#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/Tenders	#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		MO	7	$111,478	In-kind contribution from MODOT	$2,400	yes

Fleet 2 Information:

Current Vehicle Information																New Vehicle/Technology Information										
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)	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/ 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 for PM and NOx or NMHC+NOx	New Fuel Type	Annual Idling Hours Reduced (per engine)	Technology Unit Cost	Technology Unit Installation Cost
NonRoad	Construction	Tractors/Loaders/Backhoes	#8GT1429IA10871	John Deere	DB33A	WDWXL03.3AMN	1998	62		Tier 1	PM: N/A, NOx: 9.2 g/kW-hr	Diesel (LSD), 500 ppm	14000		300		2009	Biodiesel (B20)									Biodiesel 20			
NonRoad	Construction	Aerial Lifts	#BWK0309198722	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 additional lines as necessary to capture project fleet information.

Project 3 Information

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 & Tug Repower Project	XYZ Towing & Transportation Company	Marine	2	New York		NY	2	$1,500,000	XYZ Towing & Transportation Company	$1,000,000	yes

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

Fleet 3 Information for MARINE VESSELS ONLY

Current Vessel Information	New Vessel/Technology Information

Sector	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 per Cylinder (Liters)	Current Tier Level	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel 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
				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					
				auxilliary					1975	200	0.9 <= size < 1.2	Tier 0		Diesel (LSD), 500 ppm	30000			2011	Vehicle/Equipment Replacement	John Deere	CKM100DM3		2010			Tier 2					
				auxilliary					1975	200	0.9 <= size < 1.2	Tier 0		Diesel (LSD), 500 ppm	30000			2011	Vehicle/Equipment Replacement	John Deere	CKM100DM3		2010			Tier 2					
Marine	Tug Boat/ Tow Boat	Tug#1	4																												
				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					
Marine	Tug Boat/ Tow Boat	Tug#2	2																												