Instructions: Complete all relevant fields in this worksheet and use the other worksheets in this excel file to provide your project fleet descriptions.

U. S. Environmental Protection Agency State Clean Diesel Grant Program -Final Report

	CT Department of Energy &					
Grant Recipient	Environme	ntal Protection				
Grant #	DS - 00.	A00154 - 7				
Reporting Period	F	inal				
WORKPLAN BUDGET	FY17 FY18					
Total EPA Funds	\$353,697.00 \$413,031.00					
Awarded	\$555,097.00	\$415,051.00				
Total Mandatory	\$1,106,653.04 \$2,036,287.1					
Cost-Share	\$1,100,033.04	\$2,030,287.14				
Total Voluntary	\$235,798.00	\$391,092.71				
Matching Funds	\$255,798.00	\$391,092.71				
Total Project Costs	\$1,696,148.04	\$2,840,410.85				

	Table 1. Total Funds Expended						
	Federal Funds Mandatory Cost- Voluntary Match E		ch Expended				
	Expended	Share Expended	v w Mittigation	Other Funds			
Personnel	\$52,287.70						
Fringe Benefits	\$45,795.37						
Travel							
Equipment							
Supplies							
Contractual							
Subawards							
Participant Support Costs							
(e.g., Rebates)	\$651,719.00		\$511,152.00	\$115,738.71			
Other		\$3,142,940.18					
Indirect Charges	\$16,925.93						
TOTALS	\$766,728.00	\$3,142,940.18	\$511,152.00	\$115,738.71			

	Table 2. Narrative Responses					
Question	Answer					
	CT Dept. of Energy & Environmental Protection (DEEP) State DERA2 Administrative Activities: DEEP prepared and submitted notices of intent to participate and applications for DERA funding. DEEP conducted open competitions and selected clean diesel proposals for funding under this grant. Selected projects were incorporated into revised work plans that were submitted to EPA for approval. DEEP worked with recipients to develop scopes of work, purchase orders and contracts for implementing the grants. DEEP monitored and documented the progress of all projects. DEEP reviewed and approved the scrappage documentation and requests for payment, consulting with EPA as needed. DEEP prepared and submitted required quarterly reports. DEEP files appropriate reports and reimbursement forms with Wilmington Trust for the DERA Option projects.					
	C & S Wholesale Grocers, Inc. (C & S) Windsor Locks Idle Reduction Project: C & S is receiving a grant of \$350,110.83 toward the replacement of twelve 2005 MY transport refrigeration unit (TRU) trailers with hybrid electric TRU (e-TRU) trailers and the installation of sixty truck stop electrification (TSE) (a.k.a. shorepower) units to reduce emissions from diesel-powered TRUs parked at the distribution facility in Windsor Locks, Connecticut. The VW Trust and EPA match incentive are the source of the funds for this project, which will not commence until after the VW Trust funds become available. C & S withdrew from the program on January 31, 2019 citing multiple business challenges that have reduced available personnel and financial resources.					
	Metropolitan District (MDC) VACTOR Truck Replacement Grant: \$137,628.23 is being awarded to the MDC, to use toward the early replacement of a 2007 model year (MY) VACTOR truck (2006 MY engine) with a 2018 MY equivalent. An additional \$2,700.81 will be added to the grant when the Volkswagen State Mitigation Trust (VW Trust) funds become available. MDC's reimbursement request for \$137,628.23 was submitted September 14, 2018 and approved for payment on October 3, 2018. The project was completed ahead of schedule.					
	Woodstock Academy (Woodstock) 2 School Bus Replacement Grant: Woodstock will be using a grant of \$45,115.77 toward early replacement of two school buses, one a small (35 passenger) 2001 MY Freightliner and one a full-size (52-71 passenger) 2002 MY International, with 2017 MY equivalents. Woodstock withdrew from the program on February 28, 2018 citing changes in student transportation needs and funding priorities related to campus expansion.					
	Town of Coventry 2017 Snowplowing Dump Truck Project (Coventry2017): Coventry was awarded a grant of \$45,115.77, from DEEP's State DERA allocation, toward early replacement of a MY 2002 heavy-duty, snow-plowing dump truck. The projected cost is \$200,000.00 and the grant represents less than 25% of the projected cost of the replacement 2018 MY dump truck. Coventry's reimbursement request for \$45,115.77 was submitted March 13, 2019 and approved for payment on March 19, 2019. The project was completed on schedule.					
	Atlas Concrete Products (Atlas) Flatbed Truck & Crane Replacement Project: Atlas received \$76,280.79 toward the early replacement of a model year 2002 Class 8 flatbed truck with hydraulic crane. The funds came from the "DERA Option" under VW NOx Mitigation Trust Agreement. Because the manufacturer has been waiting for parts and cannot meet the delivery date, Atlas developed a revised work schedule and has filed a request for an extension to December 15, 2019. On August 1, 2019, EPA granted an extension of DEEP's FY2017-2018 State DERA grant to February 15, 2020. In the 10th quarter, Atlas scrapped its old truck and prepared its reimbursement request, which was submitted February 19, 2020. The reimbursement request was approved for payment February 28, 2020 and forwarded to WT for payment in March. This is the first of Connecticut's DERA Option projects to be completed and reimbursed.					
	Town of Beacon Falls (Beacon Falls) Dump Truck Replacement Project: Beacon Falls received a grant of \$40,905.04 toward the early replacement of a MY 2000 snowplowing dump truck with a MY 2019 equivalent. The funds came from 2018 State DERA. In the eighth quarter, Beacon Falls took delivery of the new truck, scrapped the old truck and compiled documentation for reimbursement, which was approved for payment in October (ninth quarter).					
	Town of Burlington (Burlington) Dump Truck Replacement Project: Burlington is receiving a grant of \$42,029.59 toward the early replacement of a MY 1997, Class 8 diesel dump truck with a MY 2020 equivalent. The funds came from 2018 State DERA. In the eighth quarter, Burlington accepted delivery of its new truck and submitted its reimbursement request. The request was approved for payment on July 30, 2019.					

I	Town of Coventry 2018 Snowplowing Dump Truck Project (Coventry 2018): Coventry will be using a grant of
	\$49,326.66 toward the early replacement of a MY 2004 dump truck with a MY 2019 equivalent. The funds came from 2018 State DERA. Reimbursement request documents were compiled for submission in October. Invoices indicated that the actual cost of the project was less than the original proposal so the grant was reduced to 25% of the actual cost or \$49,210.99. The reimbursement request was approved for payment on October 22, 2019.
	Town of East Hartford (East Hartford) Backhoe & Mower Replacement Project: A grant of \$90,231.70 has been awarded to East Hartford (East Hartford) Backhoe & Mower Replacement Project: A grant of \$90,231.70 has been awarded to East Hartford for the replacement of one 88 horsepower (hp), MY 1999 backhoe with a Tier 1 engine and two agricultural mowers; one mower is MY 2001, with an 87 hp, Tier 1 engine and the other is MY 2010 with an 88 hp, Tier 1 engine. The new equipment will be MY 2019; the engine on the new backhoe will be Tier 4 and the engines on the new mowers will be Tier 3. The funds came from 2018 State DERA. In the eighth quarter, East Hartford completed its project by accepting delivery of the backhoe, scrapping the old equipment and submitting its reimbursement request. The request was approved for payment on September 12, 2019.
	Bartholomew L. Mansi, III, d.b.a. Guilford Lobster Pound (Guilford Lobster Pound) Marine Repower Project: Guilford Lobster Pound, is receiving a grant of \$44,857.88 for the replacement of a 1997 MY Caterpillar, Tier 0 marine engine for the FV Erica Paige with a new Tier 3 marine engine. The funds came from DEEP's voluntary contribution. Guilford Lobster Pound submitted an interim reimbursement request for the engine, which was approved April 15, 2019, and a final reimbursement request for the installation, which was approved April 24, 2019.
Summarize the accomplishments that occurred during the grant period.	Donald J. King, II, d.b.a. King Lobster (King Lobster) Marine Repower Project: The FV Kory Alexander, owned by King Lobster, replaced a Tier 0 engine with a new, Tier 3 engine through a grant of \$27,258.73 from DEEP's voluntary contribution. An interim reimbursement of \$19,261.65 for the engine was submitted and approved on June 20, 2019. In the eighth quarter, King Lobster compiled and submitted documentation for the final reimbursement for installation. Final payment of \$7,997.08 was approved on August 29, 2019.
	Savino Transportation, Inc. (Savino) School Bus Replacement Project (Diesel to Propane): A grant of \$43,311.22 helped Savino to begin the transition of its rural school bus fleet from diesel to propane. Two diesel-powered, MY 2006 school buses were replaced, ahead of schedule, with MY 2020, propane-powered equivalents at a total cost of \$180,000.00. This was funded by the State DERA allocation. Savino completed its project by scrapping the two old buses on July 19, 2019 and accepting delivery of the new buses on August 7, 2019. The reimbursement request for \$43,311.22 was approved for payment on August 27, 2019.
	State Line Propane, LLC (State Line) Tractor Replacement Project: State Line received a grant of \$31,035.62 for early replacement of a MY 2000 Class 8 tractor with a MY 2020 equivalent. The funds came from 2018 State DERA and from DEEP's voluntary contribution. In the eighth quarter, State Line compiled and submitted its reimbursement request package, which was approved for payment on August 16, 2019.
	Sysco Corporation (Sysco) 7-Truck Replacement Project: DEEP granted \$149,233.61 to Sysco Leasing, LLC for the replacement of five, MY 2005-2006, Class 8 diesel freight trucks and two, MY 2006 Class 7 diesel freight trucks with 2019 MY diesel equivalents. The funds came from the "DERA Option" under VW NOx Mitigation Trust Agreement. In August, Sysco received word from its vendor that the delivery of the trucks would be delayed until November because parts were unavailable. Having already received an extension of the 2017-2018 State DERA grant from EPA, DEEP granted Sysco an extension to November 30, 2019. The Class 8 trucks were delivered in December and the old trucks were scrapped. In the ninth quarter, DEEP granted an extension to March 31, 2020 to allow the vendor to deliver the two Class 7 trucks. Having been granted an extension to accommodate delayed delivery of the Class 7 trucks, Sysco submitted its reimbursement request on March 31, 2020. The request was advanced for internal review June 1, 2020. DEEP approved the reimbursement request on June 18, 2020. The request was forwarded to WT on June 30, 2020 and approved for payment under the VW DERA Option on July 1, 2020.
	Thimble Islands Ferry Company (Thimble Islands Ferry) Marine Repower Project: Thimble Islands Ferry repowered its boat, the <i>MV Adraien B</i> , replacing a 1997 Tier 0 engine with a new Tier 3 marine engine using a grant of \$13,679.80. The funds came from DEEP's voluntary contribution. This project came in under budget; the project cost in the proposal was \$35,533.00 and the final cost was \$30,553.86. The grant was reduced to \$12,221.54, covering 40% of the revised cost, which is still less than the original grant of \$13,679.80. Thimble Islands Ferry submitted its request for reimbursement of \$12,221.54, which was approved July 29, 2019.
	Tirollo Bus Company, LLC School Bus Replacement Project (Tirollo Bus 2017) (Diesel to Gasoline): Tirollo Bus used its grant of \$19,249.43 to replace a MY 2006 diesel-powered school bus with a 2020, gasoline-powered equivalent. The funds came from 2018 State DERA. Tirollo had its old bus scrapped in August. The reimbursement request was compiled and submitted in September and approved in October of 2019.
	Town of West Hartford (West Hartford) Dump Truck Replacement Project: A grant of \$63,237.62 enabled West Hartford to replace a MY 1995 maintenance dump truck, which is not included in the town's replacement schedule for 2019-2021. The funds came from 2018 State DERA. West Hartford accepted delivery of the new vehicle August 1 and scrapped the old vehicle on August 19, 2019. The reimbursement request was submitted and was approved for payment on August 29, 2019.
	Wethersfield Dump Truck Replacement Project: Wethersfield was awarded a grant of \$49,086.05 toward the early replacement of a MY 2007 (engine MY 2006) dump truck with a MY 2019 equivalent. However, Wethersfield withdrew from the program on April 2, 2019 because the Town Council declined to approve the purchase of the new truck.
	Gateway Terminal, LLC (Gateway) Drayage Truck Project: DEEP granted a total of \$367,372.48 to Gateway for the replacement of six Class 8 diesel drayage trucks, MY 2006-2009, with 2021 MY diesel equivalents. \$285,637.60 came from the "DERA Option" under VW NOx Mitigation Trust Agreement, \$66,675.73 from FY 2017-2018 State DERA allocation and bonus, and \$15,059.15 is from State SEP funds added as an increase to the 2017-2018 voluntary match. The projected cost is \$801,000.00 and the total grant represents less than 50% of the projected cost of the six 2021 MY replacement trucks. The project will enhance air quality in the New Haven port area and in surrounding environmental justice residential neighborhoods by reducing diesel emissions and will decrease fuel consumption. Because of the revision to Tirollo's grant in the eleventh quarter, DEEP was able to increase Gateway's grant to \$386,083.12. In the twelfth quarter, Gateway completed its project by registering the new trucks, scrapping the old trucks and submitting its reimbursement request. DEEP approved the request for \$386,083.12, which involved funds from State DERA, DERA Option (VW) and State SEP funds. A request for \$285,637.60 in DERA Option funds was forwarded to WT on September 24, 2020; the request was approved on October 2, 2020. State SEP funds totaling \$15,059.15 were also awarded. The remaining DERA funds, totaling \$85,386.37, were drawn down in the thirteenth quarter.

	Tirollo Bus Company, LLC (Tirollo Bus 2019): Tirollo initially planned to use its grant of \$39,429.47 to replace two diesel-powered school buses, MY 2000 and 2008, with 2021, gasoline-powered equivalents. The project cost was \$171,940.00. Tirollo's fleet serves the Town of Orange, in New Haven County. This is the second DERA-funded project in Tirollo's ongoing plan to upgrade its school bus fleet. The award to Tirollo represents less than 25% of the overall project cost and came from the FY 2017-2018 State DERA allocation and bonus. In the eleventh quarter, because of the Covid-19 school shutdown, Tirollo could only afford to replace one of its buses this year and requested a revision of the grant. The funds for Tirollo's second bus were divided project cost of \$85,970.00. The funds came from the FY 2017-2018 State DERA allocation and bonus. In the output of \$20,718.83 which is still less than 25% of the revised project cost of \$85,970.00. The funds came from the FY 2017-2018 State DERA allocation and bonus. The contract for the revised project was signed May 22, 2020. In the twelfth quarter, Tirollo completed its project to replace one MY 2000 diesel-powered school bus with a gasoline-powered equivalent. The final cost of \$91,429.10 was greater than originally estimated, but the grant amount remained the same. The reimbursement request for \$20,718.83 was approved for payment October 28, 2020. Funds were drawn down in the thirteenth quarter.
	MDC VACTOR Truck Replacement Grant: MDC's reimbursement request for \$137,628.23 was submitted September 14 2018 and approved for payment on October 3, 2018. Coventry 2017 Snowplowing Dump Truck Project: Coventry's reimbursement request for \$45,115.77 was submitted March 13, 2019 and approved for payment on March 19, 2019. Atlas Flatbed Truck & Crane Replacement Project: Atlas submitted its reimbursement request for \$76,280.79 on February 19, 2020. The reimbursement request was approved for payment February 28, 2020 and forwarded to WT for payment in March. Beacon Falls Dump Truck Replacement Project: In the eighth quarter, Beacon Falls compiled and submitted documentation for reimbursement of \$40,905.04, which was approved for payment in October (ninth quarter). Burlington Dump Truck Replacement Project: In the eighth quarter, Burlington submitted its reimbursement request for \$42,029.59. The request was approved for payment on July 30, 2019.
	 Coventry 2018 Snowplowing Dump Truck Project: Reimbursement request documents were compiled for submission in October. Invoices indicated that the actual cost of the project was less than the original proposal so the grant was reduced to 25% of the actual cost or \$49,210.99. The reimbursement request was approved for payment on October 22, 2019. East Hartford Backhoe & Mower Replacement Project: In the eighth quarter, East Hartford completed its project by submitting its reimbursement request for \$90,231.70. The request was approved for payment on September 12, 2019. Guilford Lobster Pound Marine Repower Project: Guilford Lobster Pound submitted an interim reimbursement request for the engine, which was approved April 15, 2019, and a final reimbursement request for the installation, which was approved April 24, 2019. The total of the two reimbursements was \$44,857.88.
Did you award any rebates or subawards during the grant period? If so, list the recipients and how much funding they received.	King Lobster Marine Repower Project: An interim reimbursement of \$19,261.65 for the engine was submitted and approved on June 20, 2019. In the eighth quarter, King Lobster compiled and submitted documentation for the final reimbursement for installation. Final payment of \$7,997.08 was approved on August 29, 2019. The total of these reimbursements was \$27,258.73 Savino School Bus Replacement Project (Diesel to Propane): Savino's reimbursement request for \$43,311.22 was approved for payment on August 27, 2019. State Line Tractor Replacement Project: In the eighth quarter, State Line compiled and submitted its reimbursement
	request package for \$31,035.62, which was approved for payment on August 16, 2019. Sysco 7-Truck Replacement Project: Sysco submitted its reimbursement request for \$149,233.61 on March 31, 2020. DEEP approved the reimbursement request on June 18, 2020. The request was forwarded to WT on June 30, 2020 and approved for payment under the VW DERA Option on July 1, 2020. Thimble Islands Ferry Marine Repower Project: In the eighth quarter, Thimble Islands Ferry submitted its request for reimbursement of \$12,221.54, which was approved for payment July 29, 2019.
	 Tirollo 2018 Bus School Bus Replacement Project (Diesel to Gasoline): Tirollo Bus's reimbursement request for \$19,249.43 was compiled and submitted in September and approved in October of 2019. West Hartford Dump Truck Replacement Project: West Hartford's reimbursement request for \$63,237.62 was submitted and was approved for payment on August 29, 2019. Gateway Drayage Truck Project: In the twelfth quarter, Gateway submitted its reimbursement request. DEEP approved
	the request for \$386,083.12, which involved funds from State DERA, DERA Option (VW) and State SEP funds. A request for \$285,637.60 in DERA Option funds was forwarded to WT on September 24, 2020; the request was approved on Octobe 2, 2020. State SEP funds totaling \$15,059.15 were also awarded. The remaining DERA funds, totaling \$85,386.37, were drawn down in the thirteenth quarter. Tirollo Bus 2019: In the twelfth quarter, Tirollo completed its project to replace one MY 2000 diesel-powered school bus
	with a gasoline-powered equivalent. The reimbursement request for \$20,718.83 was approved for payment October 28, 2020. Funds were drawn down in the thirteenth quarter. C & S Windsor Locks Idle Reduction Project: C & S received a grant of \$350,110.83 toward the replacement of twelve 2005 MY transport refrigeration unit (TRU) trailers with hybrid electric TRU (e-TRU) trailers and the installation of sixty truck stop electrification (TSE) (a.k.a. shorepower) units to reduce emissions from diesel-powered TRUs parked at the distribution facility in Windsor Locks, Connecticut. C & S withdrew from the program on January 31, 2019 citing multiple burgers at the longers of the program of a foregring and program on January 31, 2019 citing multiple
	business challenges that have reduced available personnel and financial resources. Woodstock 2 School Bus Replacement Grant: Woodstock was awarded a grant of \$45,115.77 toward early replacement of two school buses, one a small (35 passenger) 2001 MY Freightliner and one a full-size (52-71 passenger) 2002 MY International, with 2017 MY equivalents. Woodstock withdrew from the program on February 28, 2018 citing changes in student transportation needs and funding priorities related to campus expansion. Wethersfield Dump Truck Replacement Project: Wethersfield was awarded a grant of \$49,086.05 toward the early
Provide a comparison of actual accomplishments with the anticipated outputs/outcomes and timelines/milestones specified in the original project Work Plan.	replacement of a MY 2007 (engine MY 2006) dump truck with a MY 2019 equivalent. However, Wethersfield withdrew from the program on April 2, 2019 because the Town Council declined to approve the purchase of the new truck. Tirollo Bus Company, LLC (Tirollo 2019): In the eleventh quarter, because of the Covid-19 school shutdown, Tirollo could only afford to replace one of its buses this year and requested a revision of the grant. The funds for Tirollo's second bus were divided proportionally between Gateway and Tirollo giving Tirollo a grant of \$20,718.83, which is still less than 25% of the revised project cost of \$85,970.00. Tirollo requested and received an extension to October 31, 2020 for compilation of the reimbursement documents.
	Atlas Flatbed Truck & Crane Replacement Project: Because the manufacturer has been waiting for parts and cannot meet the delivery date, Atlas developed a revised work schedule and has filed a request for an extension to December 15, 2019. On August 1, 2019, EPA granted an extension of DEEP's FY2017-2018 State DERA grant to February 15, 2020.

	Sysco 7-Truck Replacement Project: In the eighth quarter, Sysco received word from its vendor that the delivery of the trucks would be delayed until November because parts were unavailable. Sysco requested an extension of its completion deadline to November 30, 2019. Having already received an extension of the 2017-2018 State DERA grant from EPA, DEEP granted Sysco an extension to November 30, 2019.
	Beacon Falls, Tirollo Bus 2018, East Hartford and Coventry 2018 reported that they couldn't meet the August 31, 2019 deadline due to issues associated with scheduling scrappage and compiling reimbursement documentation; all were granted short extensions for paperwork and completed their projects before the end of the eighth quarter.
	All of the other 2017-2018 projects were completed on or ahead of schedule.
	In the 7th quarter, the vendor for Atlas Concrete reported that the manufacturer has been delayed due to unavailability of parts. Atlas Concrete requested an extension to December 15, 2019; that request, accompanied by a revised completion schedule, was forwarded to the EPA Project Officer, who granted an extension of DEEP's 2017-2018 Grant to February 15,
	Coventry had been negotiating with its vendor, who agreed to deliver the chassis and body for assembly in July. DEEP offered to assist Coventry in requesting an extended completion date for its 2018 grant and revising its work schedule based on projections provided by the builder.
If anticipated outputs/outcomes and/or timelines/milestones from the original submitted proposal were not met, why not? Did you encounter any problems during the grant period which may have precluded you from meeting the project objectives?	because parts were unavailable. Sysco requested an extension of its completion deadline to November 30, 2019. Having already received an extension of the 2017-2018 State DERA grant from EPA, DEEP granted Sysco an extension to November 30, 2019. In the inith quarter, Sysco received word from its vendor that the delivery of the Class 7 trucks would be delayed until February or March of 2020 because parts were unavailable. Sysco requested and DEEP granted an extension of its completion deadline to March 31, 2020. In the enth quarter, DEEP's COVID-19 teleworking schedule resulted in delays related to electronic signatures on purchase orders and contracts for the two new projects, and on DERA Option documents submitted to Wilmington Trust. The DEEP signature issues were resolved. A decision from Wilmington Trust regarding the acceptability of electronic signatures on our
	DERA Option submissions was received. Atlas Concrete requested an extension to December 15, 2019; that request, accompanied by a revised completion schedule, was forwarded to the EPA Project Officer, who granted an extension of DEEP's 2017-2018 Grant to February 15, 2020. On August 2, 2019, Coventry requested an extended completion date for its 2018 grant based on projections provided by
	the builder. Since EPA had already approved an extension of CT's grant, On August 5, 2019, DEEP granted an extension of Coventry's deadline to September 27, 2019. Sysco requested an extension of its completion deadline to November 30, 2019. Having already received an extension of the
How did you remedy any problems? Detail how and the date you had to address any problems that changed the original work plan and/or work plan schedule.	2017-2018 State DERA grant from EPA, DEEP granted Sysco an extension to November 30, 2019. In the ninth quarter, Sysco received word from its vendor that the delivery of the Class 7 trucks would be delayed until February or March of 2020 because parts were unavailable. Sysco requested and DEEP granted an extension of its completion deadline to March 31, 2020.
	The DEEP signature issues were resolved internally. A decision from Wilmington Trust regarding the acceptability of electronic signatures on our DERA Option submissions was received.
	Beacon Falls, Tirollo Bus 2018, East Hartford and Coventry 2018 reported that they couldn't meet the August 31, 2019 deadline due to issues associated with scheduling scrappage and compiling reimbursement documentation; all were granted short extensions for paperwork and completed their projects before the end of the eighth quarter.
	In the fourth quarter, MDC contributed \$423,264.75 as its mandatory cost share of the purchase of its new Vactor truck; \$20,000.00 of this was income from the scrap value of the old Vactor truck (see below). In the sixth quarter, DEEP reported that MDC had contributed \$3,460.02 in leveraged (voluntary) funds that exceeded its minimum mandatory cost share. However, a closer reading of the program guide revealed that these should have been reported as "Mandatory Cost Share," reserving the "Voluntary Cost Share" designation for contributions from VW Mitigation and State SEP funds. Therefore \$3,460.02 was moved to the mandatory cost share in the 7th quarter report. In the fifth quarter, Coventry contributed \$145,978.14 as its 2017 mandatory cost share of the purchase of its new dump truck; \$798.12 of this was income from the scrap value of the old dump truck (see below). In the sixth quarter, DEEP reported that Coventry had paid \$3,543.61 in leveraged (voluntary) funds that exceeded its minimum mandatory cost share
	for 2017. However, a closer reading of the program guide revealed that these should have been reported as "Mandatory Cost Share, reserving the "Voluntary Cost Share" designation for contributions from VW Mitigation and State SEP funds. Therefore \$3,543.61 was moved to the mandatory cost share in the 7th quarter report. In the 6th quarter, Guilford Lobster Pound contributed \$44,484.60 as its mandatory cost share for the new engine for the CVE of the function of the later that the state of the
	<i>FV Erica Paige</i> . In the 7th quarter, Guilford Lobster Pound contributed \$24,581.76 as its mandatory cost share for installation of the new engine on the <i>FV Erica Paige</i> . In the sixth quarter, Atlas Concrete Products' \$3,500.00 down payment is reported as part of its mandatory cost share for the new truck. In the tenth quarter, Atlas contributed \$243,107.10 as the remainder of its cost share for the project after
	subtraction of the scrap income. In the sixth and seventh quarters, Thimble Islands Ferry contributed \$18,332.32 as its cost share for purchase and
Identify the source of any cost-share or additional leveraged funds	installation of the new engine on the <i>MV Adraien B</i> . In the 7th quarter, King Lobster contributed \$30,019.05 as its mandatory cost share for the new engine on the <i>FV Kory</i>
reported for this grant period in Table 1 above.	Alexander. The seventh quarter total mandatory match of \$61,604.44 was inadvertently omitted from the running tally of mandatory matches in the 8th quarterly report and was restored for this final report.
	In the eighth quarter, Beacon Falls contributed \$147,167.31 as its cost share for the purchase of a new dump truck.
	In the 8th quarter, Burlington contributed \$131,539.71 as its cost share for the purchase of a new dump truck.
	In the 8th quarter, Coventry contributed \$147,267.27 as its cost share for the purchase of a new dump truck under its 2018 grant.
	In the eighth quarter, East Hartford contributed \$279,329.64 as its cost share for the purchase of a backhoe and two commercial mowers
	In the 8th quarter, Savino contributed \$141,088.78 as its cost share for the purchase of two new propane-powered school buses.
	In the 8th quarter, State Line contributed \$98,408.38 as its cost share for the purchase of a new diesel tractor.
	In the eighth quarter, Tirollo Bus contributed \$19,249.43 as its cost share for the purchase of a new gasoline-powered school bus under its 2018 grant .
	In the eighth quarter, West Hartford contributed \$199,579.05 as its cost share for the purchase of a new dump truck.
	In the eleventh quarter, Sysco contributed \$470,976.39 in other leveraged funds as its cost share for the project.

	In the twelfth quarter, Tirollo contributed \$70,710.27 in other leveraged funds as its cost share for the 2019 project .
	In the 4th quarter, MDC received \$20,000.00 as income from the scrap value of its scrapped Vactor truck; this was used to offset part of its mandatory cost share for the project.
	In the 5th quarter, Coventry received \$798.12 as income from the scrap value of its scrapped dump truck; this was used t offset part of its mandatory cost share for the 2017 project .
	In the eighth quarter, Burlington received \$273.00 as the scrap value for the replaced dump truck, which it applied toward mandatory cost share.
Vas any program income generated during the grant period? dentify the amount of program income, how it was generated, and	In the 8th quarter, Coventry received \$365.71 as the scrap value for the replaced dump truck, which it applied toward the mandatory cost share for the new truck purchased with its 2018 grant .
ow the program income was used.	In the eighth quarter, East Hartford received \$438.43 as the scrap value for the two replaced mowers; this was used to of part of its mandatory cost share for the project.
	In the 8th quarter, Savino received \$600.00 as the scrap value for the two replaced buses; this was used to offset part of its mandatory cost share for the project.
	In the tenth quarter, Atlas received \$229.00 in scrap income, which was counted against its cost share for the project
	In the twelfth quarter, Gateway received \$5,442.87 as income from the sale of the scrapped trucks. The income was used part of Gateway's mandatory cost share for the project.
	On October 10, 2017, and June 6, 2018, DEEP alerted representatives of Connecticut's federally recognized tribes of the opportunity to receive National Tribal Clean Diesel funding. On March 7, 2019, DEEP forwarded the announcement of increased 2019 Tribal funding to representatives of the recognized tribes in Connecticut.
	On October 2, 2017 all CT Clean Diesel Stakeholders were notified of the opportunity to submit proposals for State DER funds. An announcement and two reminders were posted on DEEP's Clean Diesel Facebook page at #DriveCleanCT#EPADERA #CleanDiesel. These postings were seen by over 2000 people. A similar announcement was also posted on the diesel grant website and promoted in the September 2017 issue of Your Environmental Connection, DEEP's e-newsletter sent to businesses, agencies and municipalities across the state. That edition can be found at: https://myemail.constantcontact.com/News-from-CT-Dept-of-EnergyEnvironmental-
	Protection.html?soid=1104335014923&aid= fxbMs9C8VE On April 30, 2018, and January 8, 2019, DEEP forwarded information on the National DERA Incentive program to its lis diesel stakeholders. DEEP followed up on January 29, 2019 with announcements of the rescheduled webinars and on
	February 26, by forwarding the deadline extension announcement. On October 19, 2018, DEEP forwarded EPA's announcement of the 2018 Clean School Bus Rebate Program to all the sc districts in Connecticut. On October 4, 2019, DEEP forwarded EPA's notice of the 2019 Clean School Bus grant progra all the school districts in Connecticut. On October 15, 2020, DEEP contacted the State Department of Education (DOE) regarding the DERA Clean School Bus Incentive Program. The DOE then sent a notice to all the school superintendents in Connecticut promoting the program.
	On May 8, 2019, DEEP responded to a request from Senator Blumenthal for information on projects funded by Connecti State DERA program, ahead of the vote in the U.S. Senate.
	April 30, 2019, DEEP participated in a LEAN Showcase event at the State Capital. DEEP's display focused, in part, on EVConnecticut, its EVSE Installation incentive program, and on its promotion of EVs in the state. DERA funding for E' was discussed with those visiting the display.
	On April 9, 2019, DEEP posted the FY 2018 Grantees on its Diesel Grants & Funding web page at: https://portal.ct.gov/DEEP/Air/Mobile-Sources/DERA-Grants
Did any public relations events regarding this grant take place durin	On January 24, 2019, The Beacon Falls Citizen's News included an article about the town's receipt of a grant to replace a municipal dump truck. This article came to light when it was included in the reimbursement request package submitted in September of 2019 so is being included in this report.
he reporting period? Briefly describe these events	⁵ On September 30, 2019, DEEP participated in a DERA-related event in Stamford to announce a National DERA award o \$546,610 to replace municipal garbage trucks in Stamford and the annual State DERA allocation for Connecticut.
	On October 1, 2019, DEEP posted the launch of its 2019 State DERA Grant Program solicitation on its Diesel Grants & Funding web page. A similar posting was made October 15, 2019, upon the launch of the 2019 State DERA Solicitation. Diesel Grants & Funding web page can be found at:
	https://www.ct.gov/deep/cwp/view.asp?a=2684&q=322100&deepNav_GID=1619
	On October 10, 2019, DEEP announced the availability of 2019 State DERA funds through a presentation at a State Implementation Plan Regulatory Action Committee (SIPRAC) meeting held at DEEP. Results were announced at the February 13, 2020 SIPRAC meeting.
	On December 5, 2019, DEEP participated in the Energy Conservation Working Group meeting of the South Central Regi Council of Governments, presenting a talk on VW and DERA incentive programs.
	On February 1, 2020, DEEP participated in a Net-Zero Energy School Workshop at which flyers discussing DERA and o funding resources were distributed.
	On March 5, 2020, DEEP participated in a CROG meeting on electrification of municipal fleets, presenting options for funding that included DERA.
	On March 16, 2020, DEEP posted the awardees for its 2019 State DERA Solicitation on its Diesel Grants & Funding web page at: https://portal.ct.gov/DEEP/Air/Mobile-Sources/DERA-Grants
	On May 22, 2020, DEEP participated in one of a series of EV School Bus Toolkit webinars sponsored by Live Green, Connecticut Southwestern Area Clean Cities Coalition. DERA and VW funding opportunities and requirements were presented and questions were taken.
	In September of 2020, Connecticut's Office of Tourism posted an article about visiting CT's three Destination Electric communities – Madison, New Haven and Old Saybrook – in an electric vehicle. See article at: https://www.ctvisit.com/articles/explore-connecticut%E2%80%99s-shoreline-electric-vehicle
	On October 8, 2020, DEEP held an informational Webinar on the 2020 State DERA program that was well-attended. Th webinar presentation can be found on the DEEP website at: https://portal.ct.gov/-/media/DEEP/air/mobile/DERA/2020-CT-State-DERA-Webinar.pdf
	DEEP maintains a website for Diesel Grants and Funding. Information about this program administered by DEEP's Bure of Air Management can be found on the DEEP website at: https://portal.ct.gov/DEEP/Air/Mobile-Sources/DERA-Grants



Quarterly Report - DERA State Grant Program FY17-FY18 Project Narrative

dollar amount of subawards, rebates, or loans provided, as well as a breakdown of the technologies funded? Please also list any other state websites used for outreach related to the State DERA Grant	DEEP has also established a website for its Volkswagen NOX Mitigation Program. In accordance with the requirements of the VW Settlement, projects selected for "DERA Option" VW funding in the 2018 State DERA solicitation will be posted here once the projects have been submitted to Wilmington Trust and approved. https://portal.ct.gov/DEEP/Air/Mobile-Sources/VW/VW-SettlementHome
	In addition, DEEP maintains a Facebook page, Drive Clean CT, on which DERA announcements and awards are posted.

You can link to the site at: https://www.facebook.com/DriveCleanCT/

Table 3. Subaward Reporting Requirements					
Requirement	Response				
Summaries of results of reviews of financial and programmatic reports	DEEP operates its State DERA Program exclusively as a rebate program; no subawards are granted.				
Summaries of findings from site visits and/or desk reviews to ensure effective subrecipient performance					
Environmental results the subrecipient achieved					
Summaries of audit findings and related pass-through entity management decisions					
Actions the pass-through entity has taken to correct deficiencies such as those specified at 2 CFR 200.331(e), 2 CFR 200.207 and the 2 CFR 200.338 Remedies for Noncompliance					

Table 3: Summary of Total Emissions Reduction per Fiscal Year (Emission Reductions Created)						
			EPA Funding			
Fiscal Year Funding	Project Name	Entity	Expended	Emission Reductions (tons/yr)	Emission Reductions (lifetime tons)	
				HC: 0.017	HC: 0.116	
	VACTOR Truck	Metropolitan	0105 (00 00	CO: 0.060	CO: 0.169	
Fiscal Year 2017	Replacement	District (MDC)	\$137,628.23	NOx: 0.158 PM: 0.018	NOx: 1.108 PM: 0.114	
	Grant	. ,				
				CO ₂ : See note ¹	CO_2 : See note ¹	
	2017			HC: 0.018	HC: 0.055	
	Snowplowing	Town of Coventry,		CO: 0.055 NOx: 0.193	CO: 0.164	
Fiscal Year 2017	Dump Truck	CT	\$45,115.77		NOx: 0.578	
	Replacement			PM: 0.013	PM: 0.138	
	Project			CO_2 : See note ¹	CO_2 : See note ¹	
	Flatbed Truck &			HC: 0.047	HC: 0.095	
	Crane	Atlas Concrete		CO: 0.244	CO: 0.488	
Fiscal Year 2018	Replacement	Products	\$76,280.79	NOx: 0.573	NOx: 1.147	
	Project			PM: 0.037	PM: 0.073	
	j			CO ₂ : 45.0	CO ₂ : 90.0	
	Town of Beacon			HC: 0.006	HC: 0.006	
	Falls Dump Truck	Town of Beacon		CO: 0.022	CO: 0.022	
Fiscal Year 2018	Replacement	Falls, CT	\$40,905.04	NOx: 0.065	NOx: 0.065	
	Project	runs, er		PM: 0.004	PM: 0.004	
	riojeet			CO ₂ : 4.7	CO ₂ : 4.7	
	Town of			HC: 0.012	HC: 0.012	
	Burlington Dump	Town of		CO: 0.042	CO: 0.042	
Fiscal Year 2018	Truck	Burlington, CT	\$42,029.59	NOx: 0.142	NOx: 0.142	
	Replacement	Durington, C1		PM: 0.010	PM: 0.010	
	Project			CO ₂ : 4.9	CO ₂ : 4.9	
	Town of Coventry			HC: 0.023	HC: 0.094	
	2018			CO: 0.074	CO: 0.297	
Fiscal Year 2018	Snowplowing	Town of Coventry,	\$49,210.99	NOx: 0.135	NOx: 0.540	
	Dump Truck	CT		PM: 0.022	PM: 0.089	
	Project			CO_2 : see note ¹	CO ₂ : see note ¹	
	Town of East			HC: 0.038	HC: 0.056	
	Hartford Backhoe			CO: 0.384	CO: 1.130	
Fiscal Year 2018	& Mower	Town of East	\$90,231.70	NOx: 0.230	NOx: 0.363	
	Replacement	Hartford, CT		PM: 0.060	PM: 0.133	
	Project			CO ₂ : see note ¹	CO ₂ : see note ¹	
	j			HC: 0.048	HC: 0.048	
	Guilford Lobster	Bartholomew L.		CO: 0.482	CO: 0.482	
Fiscal Year 2018	Pound Marine	Mansi, III, d.b.a.	\$44,857.88	NOx: 5.194	NOx: 5.194	
	Repower Project	Guilford Lobster		PM: 0.065	PM: 0.065	
	1	Pound		CO ₂ : 80.3	CO ₂ : 80.3	
	1			HC: 0.029	HC: 0.202	
	King Lobster			CO: 0.209	CO: 1.461	
Fiscal Year 2018	Marine Repower	Donald J. King, II,	\$27,258.73	NOx: 3.189	NOx: 22.326	
- 150al 10al 2010	Project	d.b.a. King Lobster	\$27,200.75	PM: 0.038	PM: 0.269	
	110,000			CO ₂ : 27.0	CO ₂ : 189.0	
				HC: 0.019	HC: 0.113	
	Savino School			CO: 0	CO: 0	
Fiscal Year 2018	Bus Replacement	Savino	\$43,311.22	NOx: 0.154	NOx: 0.926	
1 ISCAL I CAL 2018	Project (Diesel to	Transportation, Inc.	\$ 7 3,311.22	PM: 0.013	PM: 0.077	
	Propane)			CO ₂ : see note ¹	CO ₂ : see note ¹	
				HC: 0.061	HC: 0.061	
	Chata I in T			CO: 0.413	CO: 0.413	
	State Line Tractor	Stata I ina Dranana	-	0.0.415	0.0.413	

Fiscal Year 2018	Replacement	LLC	\$31,035.62	NOx: 1.271	NOx: 1.271
	Project	LLC		PM: 0.055	PM: 0.055
	-			CO ₂ : 5.8	CO ₂ : 5.8
				HC: 0.081	HC: 0.460
	Sysco 7-Truck			CO: 0.320	CO: 1.808
Fiscal Year 2018	Replacement	Sysco Leasing, LLC	\$149,233.61	NOx: 0.887	NOx: 4.963
	Project			PM: 0.079	PM: 0.442
	-			CO ₂ : 22.1	CO ₂ : 122.5
				HC: 0.024	НС: 0.024
	Thimble Islands	Thimble Islands		CO: 0.058	CO: 0.058
Fiscal Year 2018	Ferry Marine		\$12,221.54	NOx: 0.076	NOx: 0.076
	Repower Project	Ferry Company		PM: 0.009	PM: 0.009
				CO ₂ : 4.0	CO ₂ : 4.0
	Tirollo 2018			HC: 0.023	HC: 0.140
	School Bus	Tirollo Bus Company, LLC		CO: 0	CO: 0
Fiscal Year 2018	Replacement		\$19,249.43	NOx: 0.144	NOx: 0.862
	Project (Diesel to			PM: 0.018	PM: 0.106
	Gasoline)			CO ₂ : 19.3	CO ₂ : 115.7
				HC: 0.005	НС: 0.005
	West Hartford	Town of West		CO: 0.023	CO: 0.023
Fiscal Year 2018	Dump Truck		\$63,237.62	NOx: 0.073	NOx: 0.073
	Replacement	Hartford, CT		PM: 0.005	PM: 0.005
	Project			CO ₂ : 6.9	CO ₂ : 6.9
	<u> </u>			HC: 0.121	НС: 0.653
	Gateway 6	с. т. : 1	\$386,083.12	CO: 0.444	CO: 2.407
Fiscal Year 2018	Drayage Truck	Gateway Terminal,		NOx: 1-955	NOx: 12.898
	Replacement	LLC		PM: 0.094	PM: 0.479
	Project			CO ₂ : 20,827	CO ₂ : 139,894
	Tirollo 2019			HC: 0.027	НС: 0.027
	School Bus	Tirollo Bus		CO: 0	CO: 0
Fiscal Year 2018	Replacement		\$20,718.83	NOx: 0.135	NOx: 0.135
	Project (Diesel to	Company, LLC		PM: 0.010	PM: 0.010
	Gasoline)			CO ₂ : 0	CO ₂ : 0

¹The DEQ default values did not take into account the decreased CO₂ emissions resulting from greater fuel efficiency due to features such as electronic ignition systems in the new engines; unless manufacturers' data for fuel savings or CO₂ emissions for the new engines were available to input, the DEQ cannot project the emission reductions for CO₂.



Note: Similar engines may be grouped together or entered as separate engine groups.

Instructions / Units	Fleet Information	Group 1: MDC	Group 2: Town of Coventry, 2017	Group 3: Atlas Concrete Products	Group 4: Savino
	Fiscal Year of EPA Funds Used:	2017	2017	2018	2018
	Vehicle Or Engine Group Name:	VACTOR Truck	Snowplowing Dump Truck	Flatbed Truck with Crane	Sch
	Fleet Owner:	The Metropolitan District (MDC)	Town of Coventry, CT	Atlas Concrete Products	Savino Tra
	Vehicle or Engine Group Type:	On Highway	On Highway	On Highway	On
	Primary Place of Performance	Hartford County, CT	Tolland County, CT	Statewide	Windh
	- State(s):	СТ	СТ	СТ	
	- County:	Hartford	Tolland County	Hartford County	Windł
	- City:	Hartford	Coventry	New Britain	S
	- Zip Code:	06142	06238	06053	
	Target Fleet:	Short Haul - Single Unit	Short Haul - Single Unit	Short Haul - Single Unit	School Bus
	Vehicle Class or Equipment Type:	Class 8	Class 8	Class 8	School Buses
	Z Quantity:	1	1	1	1
	Vehicle Identification Number(s):	2FZHAZDE27AX52861	1HTSDAAR52H520492	1M2K189C23M021426	1BAKFCKH78F246705
	Vehicle Make:	Sterling	International	Mack	Bluebird
	Vehicle Model:	LT9500	4900	600	Vision
	Z Vehicle Model Year:	2007	2002	2003	2008
	Engine Serial Number(s):	KCB88752	1325340	2C0239	WAX69117
	Engine Make:	Caterpillar	International	Mack	Caterpillar
	Engine Model:	C13	DT466	E7-350	C7
	Engine Model Year:	2006	2001	2002	2006
Nonroad and locomotive o				NA	NA
	Engine Horsepower:	380	290	390	190
Liters per cylinder; Nonroad and locomotive o		12.5	466 Cubic Inch	11.9	7.2
Number of Cylinders per engine; Nonroad and locomotive o		6	6 Cylinders	6	6
If unregulated, then I		6CPXH0763EBK	1NVXH0466ANB	2MKXH11.9V60	6CPXH0442HBK
	Engine Fuel Type:	ULSD	ULSD	ULSD	ULSD
Gallons per year per eng		3313	1600	10,465	1327
Hours per year per engine; Includes idling hours; Nonroad and locomotive o					NA
Miles per vehicle; On-Highway o		11400	4000	45,000	9,997
Hours per engine; On-Highway o		890	2000	600	57
Hours per year per engine; Class 8 Long-Haul Combination o					NA
Years per engine; Total number of years of engine life remaining at time of upgrade act		7	4	4	5
Year in which vehicle would normally be retired/sold by the fleet owner if not for the gra		2022	2022	2022	2023
	Year of Upgrade Action:	2018	2018	2019	2019
	_ Upgrade Type:	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement
	O Upgrade:	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - LPG/Propane
Equipment price not including labor for installat		\$564,353.00	\$194,637.52	\$317,020	\$92,500.00
Labor cost for installat		1			
	New Engine Model Year:	2018	2018	2019	2020
Nonroad and locomotive o		<u> </u>		NA	NA
	Rew Engine Horsepower:	500	370	455	320
Line-Haul Locomotive o		1		NA	NA

Quarterly Report - DERA State Grant Program FY17-FY18 Applicant Fleet Description

Liters per cylinder per engine; Nonroad and locomotive only		14.9 Liter/909.2538 in3	8.9 liter	13 L	6.8 L
Per engine; Nonroad and locomotive only	New Engine Number of Cylinders:	6 (SIX)	6 Cylinders	6	10
	New Engine Family Name:	JCEXHO912XAW	JCEXH0540LAT		KRIIE06.8BWL
	New Engine Fuel Type:	ULSD	ULSD	ULSD	LPG
Hours per vehicle; On-Highway only	Annual Idling Hours:				
Hours per vehicle; Class 8 Long-Haul Combination only	Annual Hoteling Hours Reduced:		NA	NA	NA
Gallons per year per engine	Annual Amount of Fuel Used:		NA	4000	1327

	Grant Recipient	CT Department of Energy & Environmental								
		Protection								
	Grant #	DS - 00A00154 - 7								
	Reporting Period	Final								
te: Similar engines may be grouped together or entered as separate engine groups.										
Instructions / Units	Fleet Information	Group 1: MDC	Group 2: Town of Coventry, 2017	Group 3: Atlas Concrete Products	Group 4: Savino	Transportation, Inc.	Group 5: State Line Propane		Group 6: Sysco Leasing	
	Fiscal Year of EPA Funds Used:	2017	2017	2018	2018	2018	2018		06067	
	Vehicle Or Engine Group Name:	VACTOR Truck	Snowplowing Dump Truck	Flatbed Truck with Crane	Sch	iool Bus	Tractor	Short Haul - Single Unit	Short Haul - Combination	Short Haul - Combination
	Fleet Owner:	The Metropolitan District (MDC)	Town of Coventry, CT	Atlas Concrete Products	Savino Tran	nsportation, Inc.	State Line Propane, LLC	Class 7	Class 8	Class 8
	Vehicle or Engine Group Type:	On Highway	On Highway	On Highway	On I	Highway	On Highway	2	2	3
	Primary Place of Performance	Hartford County, CT	Tolland County, CT	Statewide	Windha	am County	Hartford County	4V5NC9GF37N450492, 4V5NC9GF37N450493	4V4M19GF26N445160, 4V4M19GF66N445162	4V4M19GF97N466797, 4V4M19GF77N4 4V4M19GF97N466802
	- State(s):	СТ	СТ	СТ		СТ	СТ	Volvo	Volvo	Volvo
	- County:	Hartford	Tolland County	Hartford County	Windha	am County	Hartford County	VNL	VNM	VNM
	- City:	Hartford	Coventry	New Britain	Sc	cotland	Granby	2006	2005	2006
	- Zip Code:	06142	06238	06053		06264	06035	558752, 558817	548557, 551567	584922, 584522, 584634
	Target Fleet:	Short Haul - Single Unit	Short Haul - Single Unit	Short Haul - Single Unit	School Bus	School Bus	Short Haul - Single Unit	Volvo	Volvo	Volvo
	Vehicle Class or Equipment Type:	Class 8	Class 8	Class 8	School Buses	School Buses	Class 8	VE-D12	VE-D12	VE-D12
	Z Quantity:	1	1	1	1	1	1	2006	2005	2006
	Vehicle Identification Number(s):	2FZHAZDE27AX52861	1HTSDAAR52H520492	1M2K189C23M021426	1BAKFCKH78F246705	1BAKFCKH98F246706	1HTSCAAN8YH255706	NA	NA	NA
	Vehicle Make:	Sterling	International	Mack	Bluebird	Bluebird	International	365	365	365
	Vehicle Model:	LT9500	4900	600	Vision	Vision	4700	12.13 L.	12.13 L.	12.13 L.
		2007		2003	2008	2008	2000	6	6	12.13 L. 6
	Vehicle Model Year:	KCB88752	2002 1325340	2003	2008 WAX69117	2008 WAX68948	470HM2U1202619	6VTXH12.150S	5VTXH12.150S	6VTXH12.150S
	Engine Serial Number(s):	Caterpillar								
	Engine Make:	C13	International	Mack	Caterpillar	Caterpillar	International	ULSD	ULSD	ULSD
	Engine Model:	2006	DT466	E7-350	C7	C7	DT466E	2,208 & 1,193	3,940 & 2,316	2,896 & 2,535 & 4,660
	Engine Model Year:	2008	2001	2002	2006	2006	2000	NA	NA	NA
Nonroad and locomotive only	Engine Tier:			NA	NA	NA	NA	14,431 & 12,123	23, 693 & 13,690	18,770 & 17,442 & 28,087
	C Engine Horsepower:	380	290	390	190	190	195	106 & 156	145 & 162	77 & 391 & 119
Liters per cylinder; Nonroad and locomotive only	g	12.5	466 Cubic Inch	11.9	7.2	7.2	7.6	NA	NA	NA
Number of Cylinders per engine; Nonroad and locomotive only	5	6	6 Cylinders	6	6	6	6	6	5	6
If unregulated, then NA	Engine Family Name:	6CPXH0763EBK	1NVXH0466ANB	2MKXH11.9V60	6CPXH0442HBK	6CPXH0442HBK	YNVXH0466ANA	2024	2023	2024
	Engine Fuel Type:	ULSD	ULSD	ULSD	ULSD	ULSD	ULSD	2019	2019	2019
Gallons per year per engine	Annual Amount of Fuel Used:	3313	1600	10,465	1327	1865	11,000	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement
Hours per year per engine; Includes idling hours; Nonroad and locomotive only	Annual Usage Rate:				NA	NA	N/A	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel
Miles per vehicle; On-Highway only	Annual Miles Traveled:	11400	4000	45,000	9,997	14,741	61,943	\$59,920.00	\$100,074.00	\$100,074.00
Hours per engine; On-Highway only	Annual Idling Hours:	890	2000	600	57	57	300			
Hours per year per engine; Class 8 Long-Haul Combination only	Annual Hoteling Hours:				NA	NA	N/A	2019	2019	2019
Years per engine; Total number of years of engine life remaining at time of upgrade action	Remaining Life:	7	4	4	5	5	3	NA	NA	NA
Year in which vehicle would normally be retired/sold by the fleet owner if not for the grant	Normal Attrition Year:	2022	2022	2022	2023	2023	2021	220	345	345
	Year of Upgrade Action:	2018	2018	2019	2019	2019	2019	NA	NA	NA
	Upgrade Type:	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	12.8L.	11 L.	11 L.
	Upgrade:	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - LPG/Propane	Vehicle Replacement - LPG/Propane	Vehicle Replacement - Diesel	6	6	6
Equipment price not including labor for installation	Upgrade Cost Per Unit:	\$564,353.00	\$194,637.52	\$317,020	\$92,500.00	\$92,500.00	\$129,444.00	KDDXH12.8FED		
Labor cost for installation			,			,		ULSD	ULSD	ULSD
	New Engine Model Year:	2018	2018	2019	2020	2020	2019		-	
Nonroad and locomotive only	New Engine Tier:			NA	NA	NA	NA	NA	NA	NA
	New Engine Horsepower:	500	370	455	320	320	470	146	458	302
Line-Haul Locomotive only	New Engine Duty Cycle:		5/6	435 NA	NA	NA	NA NA	NA	*55 NA	NA
Liters per cylinder per engine; Nonroad and locomotive only	New Engine Cylinder Displacement:	14.9 Liter/909.2538 in3	8.9 liter	13 L	6.8 L	6.8 L	12.8	12.8L.	11 L.	11 L.
Per engine; Nonroad and locomotive only Per engine; Nonroad and locomotive only	New Engine Number of Cylinders:	6 (SIX)	6 Cylinders	6	10	10	6	6	6	6
	New Engine Family Name:	JCEXHO912XAW	JCEXH0540LAT	U	KRIIE06.8BWL	KRIIE06.8BWL	KDDXH12.8FED	KDDXH12.8FED	KVPTH10.8G01	KVPTH10.8G01
		ULSD	ULSD	ULSD						ULSD
Hours per vehicle; On-Highway only	New Engine Fuel Type:	5265	ULSD	ULSD	LPG	LPG	ULSD	ULSD	ULSD	ULSD
	Annual Idling Hours:									
Hours per vehicle; Class 8 Long-Haul Combination only	Annual Hoteling Hours Reduced:		NA	NA	NA	NA	NA	NA	NA	NA
Gallons per year per engine	Annual Amount of Fuel Used:		NA	4000	1327	1865	1	146	458	302

Group 7: Tirollo Bus	Group 8: Town of Beacon Falls	Group 9: Town of Burlington	Group 10: Town of Coventry, 2018		Group 11: Town of East Hartford		Group 12: Town of West Ha
2018	2018	2018	2018	2018	2018	2018	2018
School Bus	Dump Truck	Snowplowing Dump Truck	Snowplowing Dump Truck	John Deere Backhoe	Detroit Diesel Mower	Kubota Mower	Maintenance Dump Truck
Tirollo Bus Company	Town of Beacon Falls	Town of Burlington	Town of Coventry, CT	John Deele Backhoe	Town of East Hartford	Rubota Mower	Town of West Hartford
School Bus	On Highway	On Highway	On Highway	NonRoad	NonRoad	NonRoad	On Highway
Orange	Beacon Falls	Burlington	Tolland County, CT	Nontoad	East Hartford,	Nontoau	West Hartford
CT	CT	CT	CT		Connecticut		CT
New Haven County	New Haven County	Hartford	Tolland County		Hartford		Hartford County
•							-
Orange 06477	Beacon Falls 06403	Burlington 6013	Coventry 06238		East Hartford, 06108		West Hartford 06110
				Que eterretion		A	
School Bus	Short Haul - Single Unit	Short Haul - Single Unit	Short Haul - Single Unit	Construction	Agriculture	Agriculture	Short Haul - Single Unit
School Bus	Class 8	Class 8	Class 8	Tractors/Loaders/Backhoes	Agricultural Mowers	Agricultural Mowers	Class 8
1	1 1HTGBADR7YH289689	1	1		1	1	1
4UZABRDC58CZ11325		1HTSDAAR6WH527795	1HTWDAZR66J348994	T0310SE880786	70525 1722	705280 1860	1FDYK90U05VA35224
Freightliner	International	International	International	John Deere	Detroit Diesel	Kubota	Ford
C2	2554	4900	7400	John Deere 310E	Jacobsen HR 9016	Jacobsen HR 9016	L9000
2008	2000	1997	2006	1999	2001	2010	1995
WAX68443	531HM2U1203751	1064058	570HM242097310	T04045T830181	77B/1-2166	GB20891-2007	1174341
Caterpillar	International	International	International	John Deere	VM Motori	Kubota	Cummins
CAT C7	DT530	DT466	DT570	4045T	D704LTE	V3300-DI-T-ES01	N14-350E
2006	2000	1997	2005	1999	2000	2007	1995
NA	NA	NA		Tier 1	Tier 1	Tier 1	NA
210	215	250	300	88	87	88	350
210	8.7	7.6	9.3	4.5	2.7	3.318 L	14 L
8	6	6	6	4	4	4	6
6CPXH0442HBK	YNVXL0530ANA	VNV466D8DASA	5NVXH0570AEA	NA	YV5XL02.8R2V	7KBLXL03.3AAD	RCE855EJDASW
ULSD	ULSD	ULSD	ULSD	ULSD	ULSD	ULSD	ULSD
4000	815	900	1600	500.7	719.1	1175.8	1000
N/A	NA	NA	NA	970	500	678	NA
16,000	3,000	5108	4000	NA	NA	NA	3870
1000	200	453	2000	NA	NA	NA	110
N/A	NA	NA	NA	NA	NA	NA	NA
5	3	5	4	8 years	3 years	9 years	6 years
2023	2021	2023-2024	2022	2026	2021	2027	2024
2019	2019	2019	2019	2019	2019	2019	2019
Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement
Vehicle Replacement - Gasoline	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diese
\$88,164.00	\$188,072.35	\$174,673.00	\$205,000.00	\$135,000.00	\$120,000.00	\$120,000.00	\$262,813.47
2020	2019	2020	2020	2019	2019	2019	2019
NA	NA	NA	NA	4	3	3	NA
265	370	370	370	74	80-110	80-110	350-505
NA	NA	NA		NA	NA	NA	NA
8.8	8.9	8.9	8.9 liter	4.5 L.	3.3	3.3	12.8
8	6	6	6	4	4	4	6
KPSIE08.8GAS	KCEXH0540LAX	KCEXH0540LAX	KCEXH0540LAX	KPKXL04.4MT1	KYDXL3.32TDA	KYDXL3.32TDA	KDDXH12.8FED
Gasoline	ULSD	ULSD	ULSD	ULSD	ULSD	ULSD	ULSD
				NA	NA	NA	
NA	N/A	NA	NA	NA	NA	NA	NA
1714	415	436	NA	0	0	0	613

		Group 13: Gat	eway Terminal		
2018	2017	2017	2017	2017	2017
Drayage Truck #49	Drayage Truck #52	Drayage Truck #53	Drayage Truck #57	Drayage Truck #58	Drayage Truck #59
			Terminal	1	- F
On Highway	On Highway	On Highway	On Highway	On Highway	On Highway
			Haven		
			ecticut		
			Haven		
			Haven		
Short Haul - Combination	Short Haul - Combination	Short Haul - Combination	512 Short Haul - Combination	Short Haul - Combination	Short Haul - Combination
Class 8	Class 8	Class 8	Class 8	Class 8	Class 8
6					
1XPFDU9X27N734432	1XPTD09X2AD109571	1XPTD09X4AD109572	1XPTD40X49D787786	1XP5DU9X17D647266	1XPTD40X6AD796283
Peterbilt	Peterbilt	Peterbilt	Peterbilt	Peterbilt	Peterbilt
378	367	367	367	379	367
2007	2010	2010	2009	2007	2010
KCB81918	35259382	35258381	79332708	KCB67758	79389896
Caterpillar	Cummins	Cummins	Cummins	Caterpillar	Cummins
C13	ISM	ISM	ISX	C13	ISX
2006	2009	2009	2008	2006	2009
435	425	425	455	435	435
763 CI	659 CI	659 CI	912 CI	763 CI	912 CI
6	6	6	6	6	6
6CPXH0763EBK	9CEXH0661MAF	9CEXH0661MAF	8CEXH0912XAL	6CPXH0763EBK	9CEXH0912XAL ULSD
ULSD	ULSD	ULSD	ULSD	ULSD	
6,539	8,480	9,396	12,386	17,308	13,074
NA	46.644	46.470	65 769	07.070	70.641
33,350 312	46,641 436	46,179 429	65,768 514	97,272 929	73,641 812
NA	430	429	514	529	012
5	8	8	7	5	8
2025	2028	2028	2027	2025	2028
2020	2020	2020	2020	2020	2020
Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement	Vehicle Replacement
Vehicle Replacement - Diesel	Vehicle Replacement - Diesel	Vehicle Replacement - Diesel			
\$140,000.00	\$140,000.00	\$128,811.00	\$128,811.00	\$128,811.00	\$128,811.00
	\$9,330.00	\$9,330.00	\$9,330.00	\$9,330.00	\$9,330.00
2020	2020	2020	2020	2020	2020
455	455	455	455	455	455
NA	NA	NA	NA	NA	NA
12.9	12.9	12.9	12.9	12.9	12.9
6	6	6	6	6	6
	LPCRH12.9M01	LPCRH12.9M01	LPCRH12.9M01	LPCRH12.9M01	LPCRH12.9M01 ULSD
LPCRH12.9M01	111.00				
LPCRH12.9M01 ULSD	ULSD	ULSD	ULSD	ULSD	ULSD
	ULSD	ULSD	ULSD	ULSD	

roup 14: Tirollo Bus Company						
2017						
Freightliner 2000						
Tirollo Bus Company						
On Highway						
Orange						
СТ						
New Haven						
Orange						
06477						
School Bus						
Class 7						
1						
4UZ3CFAAXYCG80996						
Freightliner						
F565						
2000						
56663754						
Cummins ISB 190						
2000						
2000						
100						
190						
6.4						
6						
YCEXH0359BAP						
ULSD						
2800						
15,000						
200						
3						
2023						
2020						
Vehicle Replacement						
Vehicle Replacement - Diesel						
\$85,970.00						
400,910.00						
2020						
2020						
265						
NA						
8.8 L						
8						
LNVXF0424P01						
Gasoline						
145						
UFU						



Note: Each Vessel should be entered on a separate tab (e.g. Marine Vessel #1, Marine Vessel #2, etc). Please copy and create new tabs as needed. Similar engines may be grouped together or entered as separate engine groups. Auxiliary engines and propulsion engines must be entered as separate engine groups.

Instructions / Units	Fleet Information	Group 1: Guilford Lobster Pound	Group 2	Group 3	Group 4
	Fiscal Year of EPA Funds Used:	2018			
	Name of Vessel:	FV Erica Paige			
Per Vesse	Total # of Propulsion Engines	1			
Per Vesse	rotar // or / taxinary Erigines	0			
	Vehicle Or Engine Group Name:	Guilford Lobster Pound			
	Fleet Owner:	Bart Mansi			
	Application:	Commercial Fishing			
	Primary Place of Performance	Long Island Sound			
	- State(s):	Connecticut, New York, Rhode island			
	County:	New Haven			
	- City:	Guilford			
	- Zip Code:	6437			
	Engine Group Type:	propulsion			
Number of engines in grou	- Guantity.	1			
	Bengine Serial Number(s):	4TB05456			
	Engine Make:	Caterpillar			
	Engine Model:	3406			
	Engine Model Year:	1997			
	Engine Tier:	Tier 0			
	C Engine Horsepower:	581			
Liters per cylinder per engine		1.2 <= size <2.5			
Per engine		6			
Liters per engine		14.6 L.			
If unregulated, then N/	Engine Family Name:	NA			
	Engine Fuel Type:	ULSD			
Gallons per year per engine	Annual Amount of Fuel Used:	14000			
Hours per year per engine	Annual Usage Rate:	1600 hrs.			
Years; Total number of years of engine life remaining at time of upgrade action	Remaining Life:	3			
Year in which engines would normally be retired/sold by the fleet owner if not for the gran	Normal Attrition Year:	2021			
	Year of Upgrade Action:	2018			
	Ūpgrade Type:	Engine Replacement			
	Upgrade:	Engine Replacement - Diesel			
Equipment price not including labor/installation	Upgrade Cost Per Unit:	\$74,141.00			
Labor cost for installation	Upgrade Labor Cost Per Unit:	\$38,003.69			
	New Engine Model Year:	2019			
	New Engine Tier:	Tier 3			
Per engine	New Engine Horsepower:	610			
Liters per cylinde	New Engine Cylinder Displacement:	2.5<= size <3.5			
Per engine	New Engine Number of Cylinders:	6			
Liters per engine		10.8			
	New Engine Family Name:	KCEXN10.8AAB			
	New Engine Fuel Type:	ULSD			

Gallons per year per engine Annual Diesel Gallons Reduced: 7,136			
	7,136		



Note: Each Vessel should be entered on a separate tab (e.g. Marine Vessel #1, Marine Vessel #2, etc). Please copy and create new tabs as needed. Similar engines may be grouped together or entered as separate engine groups. Auxiliary engines and propulsion engines must be entered as separate engine groups.

Instructions / Units	Fleet Information	Group 1: King Lobster	Group 2	Group 3	Group 4
	Fiscal Year of EPA Funds Used:	2018			
	Name of Vessel:	FV Kory Alexander			
Per Vesse	Total # of Propulsion Engines	1			
Per Vesse	Total # of Auxiliary Engines	0			
	Vehicle Or Engine Group Name:	King Lobster			
	Fleet Owner:	Donald J. King, II			
	Application:	Commercial Fishing			
	Primary Place of Performance	Long island Sound			
	- State(s):	СТ			
	Z - County:	New Haven			
	- City:	Branford			
	- Zip Code:	6405			
	Engine Group Type:	propulsion			
Number of engines in group	Z Quantity:	1			
	Engine Serial Number(s):	2071166620			
	Engine Make:	Volvo			
	Engine Model:	TAMD-74			
	Engine Model Year:	2003			
	Engine Tier:	Tier 0			
	Engine Horsepower:	294			
Liters per cylinder per engine	Engine Cylinder Displacement:	0.9 <= size < 1.2			
Per engine	Engine Number of Cylinders:	6			
Liters per engine	Engine Total Displacement:	7.28			
If unregulated, then NA	Engine Family Name:	3VPXL07.3ACB			
	Engine Fuel Type:	ULSD			
Gallons per year per engine	Annual Amount of Fuel Used:	3100			
Hours per year per engine	Annual Usage Rate:	1600			
Years; Total number of years of engine life remaining at time of upgrade action	Remaining Life:	3			
Year in which engines would normally be retired/sold by the fleet owner if not for the gran		2021			
	Year of Upgrade Action:	2019			
	🗧 Upgrade Type:	Engine Replacement			
	Upgrade:	Engine Replacement - Diesel			
Equipment price not including labor/installation	문 Upgrade Cost Per Unit:	\$23,560.00			
Labor cost for installation	Upgrade Labor Cost Per Unit:	\$4,762.00			
	New Engine Model Year:	2018			
	New Engine Tier:	Tier 3			
Per engine	New Engine Horsepower:	290			
Liters per cylinde	New Engine Cylinder Displacement:	1.2 <= size <2.5			
Per engine	New Engine Number of Cylinders:	6			
Liters per engine	New Engine Total Displacement:	8.9			
	New Engine Family Name:	JCEXN08.9AAA			
	New Engine Fuel Type:	ULSD			

	Gallons per year per engine Annual Diesel Gallons Reduced:	2400			
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Note: Each Vessel should be entered on a separate tab (e.g. Marine Vessel #1, Marine Vessel #2, etc). Please copy and create new tabs as needed. Similar engines may be grouped together or entered as separate engine groups. Auxiliary engines and propulsion engines must be entered as separate engine groups.

Instructions / Units	Fleet Information	Group 1: Thimble Islands Ferry	Group 2	Group 3	Group 4
	Fiscal Year of EPA Funds Used:	2018			
	Name of Vessel:	MV Adraien B			
Per Vesse	Total # of Propulsion Engines	1			
Per Vesse	Total # Of Advinary Engines	0			
	Vehicle Or Engine Group Name:	Thimble Islands Ferry			
	Fleet Owner:	William Smith			
	Application:	Ferry/Excursion			
	Primary Place of Performance	Long Island Sound			
	- State(s):	СТ			
	- County:	New Haven			
	- City:	Branford			
	- Zip Code:	6405			
	Engine Group Type:	propulsion			
Number of engines in grou	- Quantity.	1			
	Engine Serial Number(s):	620256NC610			
	Engine Make:	Westerbeke			
	Engine Model:	4-107			
	Engine Model Year:	1986			
	Engine Tier:	Tier 0			
	C Engine Horsepower:	25			
Liters per cylinder per engin		0.9 <= size < 1.2			
Per engin		4			
Liters per engin		1.75 L.			
If unregulated, then N	Engine Family Name:	engine is too old			
	Engine Fuel Type:	ULSD			
Gallons per year per engin	, and any another of a dol obod.	740			
Hours per year per engin	Annual Usage Rate:	1480			
Years; Total number of years of engine life remaining at time of upgrade actio	Remaining Life:	3			
Year in which engines would normally be retired/sold by the fleet owner if not for the grar	Normal Attrition Year:	2022			
	Year of Upgrade Action:	2019			
	Upgrade Type:	Engine Replacement			
	Upgrade:	Engine Replacement - Diesel			
Equipment price not including labor/installatio	Upgrade Cost Per Unit:	\$13,557.00			
Labor cost for installatio	Upgrade Labor Cost Per Unit:	\$21,976.00			
	New Engine Model Year:	2019			
	New Engine Tier:	Tier 3			
Per engin		30			
Liters per cylinde	New Engine Cylinder Displacement:	size < 0.9			
Per engin		3			
Liters per engin		1.123			
	New Engine Family Name:	KBTAN01.5BCD			
	New Engine Fuel Type:	ULSD			

	Gallons per year per engine Annual Diesel Gallons Reduced:	355			
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