APPENDIX D-4 Beneficiary Eligible Mitigation Action Certification

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary: State of Florida

Lead Agency Authorized to Act on Behalf of the Beneficiary: <u>Florida Department of Environmental Protection</u> (Any authorized person with delegation of such authority to direct the Trustee delivered to the Trustee pursuant to a Delegation of Authority and Certificate of Incumbency)

Action Title:	Florida DERA 2023 - Switcher Locomotive Repower
Beneficiary's Project ID:	DG011 & DG012
Funding Request No.	(sequential) 6
Request Type: (select one or more)	□ Reimbursement
Payment to be made to: (select one or more)	X Beneficiary Other (specify):
Funding Request & Direction (Attachment A)	 Attached to this Certification To be Provided Separately

SUMMARY

 Eligible Mitigation Action

 □ Appendix D-2 item (specify):

 Action Type
 Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal): Switcher Locomptive

Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1):

Florida's Beneficiary Mitigation Plan (MP) allocates 15% of available funding for DERA projects (MP pages 3, 24, and 25.)

Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):

This project is for the replacement of high emitting uncontrolled diesel engines with new, well controlled diesel engines. This effort is in accordance with both Florida's MP and Florida's 2022 and 2023 DERA Work Plans, which focus on diesel emission reduction projects at Florida's seaports and railyards. According to EPA's Diesel Emissions Quantifier, a typical switcher locomotive diesel replacement project yields NOx reductions of over 90 percent.

Estimate of Anticipated NOx Reductions (5.2.3):

According to EPA's Diesel Emissions Quantifier, a typical switcher locomotive diesel repower project yields over a 90 percent reduction of NOx.

Identification of Governmental Entity Responsible for Reviewing and Auditing Expenditures of Eligible Mitigation Action Funds to Ensure Compliance with Applicable Law (5.2.7.1):

Florida Department of Environmental Protection (DEP).

Describe how the Beneficiary will make documentation publicly available (5.2.7.2).

DEP maintains a webpage that provides background resources and current information about the Mitigation Trust. DEP also maintains a DERA webpage as required under the federal grant. Additionally, DEP manages an electronic mailing subscription service to provide notices and information to all subscribers. All pages are navigable from the main webpage at www.FloridaDEP.gov/volkswagen.

Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8).

The Grantee is contributing 64% of the total project cost for each of the two projects. This exceeds the minimum cost-share requirement allowable under the most recent DERA Program Guide (2021).

Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9).

On February 22, 2018, DEP sent notice via ground mail and electronic mail to the representatives of the U.S. Department of Agriculture, and the U.S. Department of the Interior listed in subparagraph 4.2.8 of the Final Trust Agreement.

If applicable, describe how the mitigation action will mitigate the impacts of NOx emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10). The two projects funded through this mitigation action will replace unregulated, uncontrolled 1954-built and 1957-built diesel switcher locomotive engines operating in the Jacksonville area (DG011) and the Miami area (DG012) with new, CARB-certified, near-zero-emission new diesel switcher locomotive engines. These two projects are located in areas that Flordia has identified as Air Quality Priority Areas in the state's Beneficiary Mitigation Plan.

ATTACHMENTS (CHECK BOX IF ATTACHED)

X	Attachment A	Funding Request and Direction.
X	Attachment B	Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).
X	Attachment C	Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11).
X	Attachment D	Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding \$25,000 (5.2.6). [Attach only if project involves vendor expenditures exceeding \$25,000.]
X	Attachment E	DERA Option (5.2.12). [Attach only if using DERA option.]
	Attachment F	Attachment specifying amount of requested funding to be debited against each beneficiary's allocation (5.2.13). [Attach only if this is a joint application involving multiple beneficiaries.]

CERTIFICATIONS

By submitting this application, the Lead Agency makes the following certifications:

- 1. This application is submitted on behalf of Beneficiary <u>State of Florida</u>, and the person executing this certification has authority to make this certification on behalf of the Lead Agency and Beneficiary, pursuant to the Certification for Beneficiary Status filed with the Court.
- 2. Beneficiary requests and directs that the Trustee make the payments described in this application and Attachment A to this Form.
- 3. This application contains all information and certifications required by Paragraph 5.2 of the Trust Agreement, and the Trustee may rely on this application, Attachment A, and related certifications in making disbursements of trust funds for the aforementioned Project ID.
- 4. Any vendors were or will be selected in accordance with a jurisdiction's public contracting law as applicable. (5.2.5)
- 5. Beneficiary will maintain and make publicly available all documentation submitted in

support of this funding request and all records supporting all expenditures of eligible mitigation action funds subject to applicable laws governing the publication of confidential business information and personally identifiable information. (5.2.7.2)

DATED: April 26, 2023

Jeff Koon

 [NAME] Jeff Koerner
 [TITLE] Director Division of Air Resource Management
 [EMAIL] Jeff.Koerner@FloridaDEP.gov

[LEAD AGENCY] Florida Department of Environmental Protection

for

State of Florida [BENEFICIARY]

Attachment B

Eligible Mitigation Action Management Plan – Project Management Plan

Milestone	Estimated Start/End Date
DEP Publishes Notice of Funding Availability for potential DERA-funded emissions mitigation projects	11/16/2022
DEP Reviews Applications	12/16/2022
DEP Notifies Applicant(s) of Award	2/1/2023
DEP Develops and Executes Grant Agreement with Grantee	July 2023
Grantee Commences Work on Enumerated Deliverables	Fall 2023
Grantee Submits Final Deliverable (Scrapping Certificate)	Spring 2024
Grantee Submits Reimbursement Request to DEP	Spring 2024
DEP Reimburses Grantee/Grant Close-Out	Summer 2024
Project Completion Date	Summer 2024

Implementation and Expenditures Timeline – Project Schedule and Milestones

Budget Narrative

As noted in the timeline above, DEP has completed its review of project proposals received through the Notice of Funding Availability for the replacement of old, uncontrolled, high emission switcher locomotive diesel engines with new, near-zero-emission, Tier 5, CARB-certified diesel engines. DEP has identified two projects that provide high emissions benefits, which can be completed in a timely manner, and which is in cost range appropriate for available DERA program funding. The first project will replace a 1954 built EMD GP-9 unregulated roadswitcher locomotive to a Tier 5 Near ZeroEmission KLW NZE15BE T4L road-switcher locomotive at the CEMEX USA Baymeadows Aggregates Terminal (7460 Philips Highway, Jacksonville). The second project will replace a 1957 built EMD SW-9 unregulated switcher locomotive to a Tier 5 Near Zero Emission KLW NZE15BE T4L switcher locomotive at the CEMEX Miami Krome Aggregate Quarry (8800 SW 177th Avenue, Miami). DEP anticipates that both or these projects will be completed before the end of federal fiscal year 2024, to ensure that base and bonus funding from the EPA will be accessible. DEP is in the process of developing grant agreements detailing the specific timelines and schedules of values for each of these projects. DEP will not be using any trust funding or DERA funding for DEP staff compensation or any other administrative costs.

Marine Diesel Engine Project Estimates

	Total Approved Budget	Share of Total Budget to be Funded by the Trust	Share of Total Budget Funded by Federal DERA Grant	Cost-Share, if applicable (Grantee)
Project Totals	\$5,550,000.00	\$1,250,000.00	\$750,000	\$3,550,000.00
Percentage		22.5%	13.5%	64.0%

Projected Trust Allocations

		July 2023 – September 2024
1.	Anticipated 2022 Project Funding Request to be paid through the Trust	\$1,250,000.00
2.	Anticipated Annual Cost Share	\$4,300,000.00 (\$750,000 from DERA and \$3,550,000.00 from Grantee)
3.	Anticipated Total Project Funding by Year	\$5,550,000.00
4.	Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation ¹	\$150,241,811.60
5.	Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$1,250,000.00
6.	Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$151,491,811.60
7.	Beneficiary Share of Estimated Funds Remaining in Trust	\$15,986,933.40
8.	Net Beneficiary Funds Remains in Trust Net of cumulative Beneficiary Funding Actions (excluding investment income from principal)	\$14,786,933.40

^{1.} Inclusive of prior Funding Request Nos. 1, 2, 3, 4, 4-A, and 5.

Attachment C

Detailed Plan for Reporting on Eligible Mitigation Action Implementation

As set forth in subparagraph 5.2.11 of the Environmental Trust Agreement for State Beneficiaries (Final Trust Agreement), Beneficiaries must set for a "detailed plan for reporting on Eligible Mitigation Action implementation" to be included in an Appendix D-4 funding request. The Florida Department of Environmental Protection intends to report based on the obligations set forth in 5.3 of the Final Trust Agreement, seen below:

5.3 Beneficiary Reporting Obligations: For each Eligible Mitigation Action, no later than six months after receiving its first disbursement of Trust Assets, and thereafter no later than January 30 (for the preceding six-month period of July 1 to December 31) and July 30 (for the preceding six-month period of January 1 to June 30) of each year, each Beneficiary shall submit to the Trustee a semiannual report describing the progress implementing each Eligible Mitigation Action during the six-month period leading up to the reporting date (including a summary of all costs expended on the Eligible Mitigation Action through the reporting date). Such reports shall include a complete description of the status (including actual or projected termination date), development, implementation, and any modification of each approved Eligible Mitigation Action. Beneficiaries may group multiple Eligible Mitigation Actions and multiple sub-beneficiaries into a single report. These reports shall be signed by an official with the authority to submit the report for the Beneficiary and must contain an attestation that the information is true and correct and that the submission is made under penalty of perjury. To the extent a Beneficiary avails itself of the DERA Option described in Appendix D-2, that Beneficiary may submit its DERA Quarterly Programmatic Reports in satisfaction of its obligations under this Paragraph as to those Eligible Mitigation Actions funded through the DERA Option. The Trustee shall post each semiannual report on the State Trust's public-facing website upon receipt.

Attachment D

Detailed Cost Estimates from Selected or Potential Vendors for Each Proposed Expenditure

The cost estimate for the two projects addressed in this funding request has a ceiling of \$5,550,000. The estimated cost per engine is \$2,775,000. Cost estimates were provided by the grantee during the project application period. Based on public information provided through surveys and requests for information, this range of prices is the best current estimate for engine replacements for switcher locomotives that are most common for the size and scope of the project that DEP is aiming to fund. A specification sheet for the specific new diesel engine type planned for these two projects, together with the two Diesel Emissions Reduction Act Switcher Locomotive Replacement and Repower Application Worksheets completed by the grant applicant, are attached below.

DEP is making one funding request for this project. DEP is requesting \$1,250,000 in Mitigation Trust funds for this project.

Eligible Replacement Marine Diesel Engine	Estimate	
Tier-5 Near Zero Emission KLW Engine	\$ \$2,775,000.00 per engine	

Budget Category	Estimate
-----------------	----------

Freight	0.00
Labor (dismantle, removal, repower, electrical, welding, scrapping, etc.)	0.00
Equipment & Supplies (Tier-5 Near Zero Emission KLW Engines [2])	\$5.550,000.00
Overhead	0.00
Fringe Benefits	0.00
Travel	0.00
Total Project Cost	\$5,550,000.00



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

Diesel Emissions Reduction Act Switcher Locomotive Replacement and Repower Application Worksheet

Project Applicability:

This grant application worksheet is available for owners of one or more eligible diesel switcher locomotives (Unregulated through Tier 2+) that wish to apply for partial reimbursement of the costs associated with replacing the eligible locomotive with a new Tier 4 diesel locomotive or partial reimbursement of the costs associated with converting the power plant of an eligible locomotive to a Tier 4 power plant.¹ Eligible projects must be located at a Florida railyard and/or commercial seaport in one of the Air Quality Priority Areas specified in <u>Florida's Beneficiary</u> <u>Mitigation Plan</u>. Additional eligibility requirements may be found in the U.S. Environmental Protection Agency's (EPA) <u>2021-2022 Diesel Emissions Reduction Act (DERA) State Grants Program Guide</u>.

No funds awarded under this program shall be used to replace switcher locomotives that operated fewer than 1,000 hours per year during the two years prior to the project.

Project Description:

The Department of Environmental Protection (Department) intends to make this round of DERA funding available to owners that wish to replace an eligible diesel switcher locomotive (Unregulated through Tier 2+) with a new Tier 4 diesel switcher locomotive or to repower an eligible locomotive with a Tier 4 power plant. The Department will reimburse the owner a percentage of the total project cost consistent with DERA program requirements for the replacement of eligible diesel switcher locomotives or the repowering of eligible diesel switcher locomotives.

As a condition of participating in this DERA project, the owner of the switcher locomotive must provide to the Department evidence that the owner has scrapped or permanently disabled the replaced switcher locomotive or switcher locomotive engine within thirty (30) days of receipt of the new unit. Any owner of an eligible switcher locomotive or switcher locomotive engine that submits this worksheet and enters into a grant agreement with the Department must complete the scope of work and submit all invoices and support materials to the Department within strict state budget and federal funding parameters and timelines.

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

The Department intends to make project funds available to one or more eligible applicants that complete and submit this worksheet by **Friday, December 16, 2022**. Grant awards will be subject to the availability of funds allocated to the State of Florida under EPA's DERA program and state budget authority. Priority will be given to projects that provide high emissions benefits, that can be completed in a timely manner, and that will encumber a significant quantity of available funding. Switcher locomotives are only eligible for funding if the primary activity of the project unit is to provide services in the vicinity of a commercial seaport or railyard. If the number of eligible projects submitted exceeds the available funding for this notice, the Department reserves the right to identify applicants from this round of funding for potential future projects. The Department reserves the right to reject any and all bids or to accept minor irregularities in application materials in the best interest of the State of Florida.

Once the Department has identified project partners for this round, the Department will prepare grant agreements specific to each project partner. Each grant agreement will include a detailed scope of work, timeline, and reimbursement schedule. All interested parties must complete and submit this application worksheet to the Department's Division of Air Resource Management Program Administrator at <u>Preston.McLane@FloridaDEP.gov</u> by the submittal deadline.

App	Applicant Information – Switcher Locomotive Replacement or Repower Project							
1) Applicant	's name:							
2) Authorize	d corporate office	er or partner's r	name:					
3) Street add	ress:			4) Ci	ty:			
5) State:		6) Zip:		7) Co	ounty:			
8) Mailing ad	ddress if different	than above:		9) Ci	ty:			
10) State:	10) State: 11) Zip: 12)			12) C	County:			
13) Email ad	dress:			14) C	Contact phone:			
15) Is the project located in an Air Quality Priority Area?					□ Yes		□ No	
16) Is the project a whole switcher replacement or an engine only repower? (Check one box to the right.)				□ W Swite	hole her		Repower	
17) Please complete the following table with information specific to the existing locomotive(s).				tive(s).				
HorsepowerEngine ModelEngine TierAnnual Hours of Operation		An	nual Fuel Gallons	E	stimated Total Project Cost			
18) Does the documentatio of information	intended project n to verify all pro n listed above? (C	unit have suffic ogram requirem Check one box t	cient lents and each to the right.)	ı unit		□ Yes		🗆 No

Note: Please refer to the 2021-2022 DERA Grant Program Guide to determine if your diesel engine is eligible to be replaced.



VWMTF Program Administered by the Florida DOEP

Project Description: Replacement of an EMD GP-9 unregulated road-switcher locomotive to a Tier 5 Near Zero Emission KLW NZE15BE T4L road-switcher locomotive.

End-User: CEMEX USA Baymeadows Aggregates Terminal 7460 Philips Highway Jacksonville, Florida 32256

Existing Locomotive Description: Unregulated / uncontrolled road-switcher locomotive

Existing Locomotive Make: EMD

Existing Locomotive Model: GP-9

Existing Locomotive Unit Number: CEMEX Frame Serial Number 5373-1

Existing Locomotive Build Date: 1954

Existing Engine Make: EMD

Existing Engine Model: 16-567-C unregulated / uncontrolled

Existing Engine Serial Number: 92-M3-7507

Existing Engine Build Date: 1954 original engine build date and later rebuilt in kind in 1992 as an uncontrolled / unregulated primary engine

Brake Horsepower: 1950

Hours of Usage: 2,493 hours in 2021 and 2,141 hours YTD 2022

Annual Fuel Usage: 15,500 gallons averaged annually over the last 2 years

Near Zero Emission Locomotive Description: EPA certified as Tier 4 compliant, and CARB verified through Executive Order to Tier 4 Near Zero Emission compliance and also complaint to CARB's proposed Tier 5 locomotive emission standards which were recently resubmitted for final review and adoption by the U.S. EPA.

Near Zero Emission Locomotive Make: Knoxville Locomotive Works

Near Zero Emission Locomotive Model: NZE15BE T4L repowered and remanufactured

Near Zero Emission Locomotive Unit Number: TBA

Locomotive Build Date: 2023

Engine Make: MTU

Engine Model: MTU-KLW 16V2000 S96

Engine Serial Number: TBD

Brake Horsepower Rating: 1560 (MTU)

Future Hours of Usage: 1,500 hours forecasted annually with utilization of the Automatic Engine Start-Stop(AESS) idle limiting feature of the Near Zero Emission locomotive.

Annual Fuel Usage: 9,300 gallons forecasted annually due to a 40% decrease in fuel consumption with the high-pressure common rail fuel injection system of the new engine and installation of the AESS device.

Funding Program: Requires a minimum of 1,000 hours of annual operational time of the locomotive during the latest 12-month period.

Funding Availability: FL DERA grant at 40% or estimated \$1,110,000 of the newly repowered and remanufactured locomotive cost at \$2,775,000 with belt pack operated remote control.

NZE Locomotive Delivery: 12-15 months from formalized notification to proceed.

Diesel Emissions Quantifier: Air Resources Board of California Protocol (see Exhibit I).

Capital Grant Funding Request: \$1,110,000 FL DOEP DERA 40% grant with 60% CEMEX match of \$1,665,000

Project Cost Effectiveness: \$6,261 perton

VWMTF Program Schedule Phase 1: FL DOEP issues Notice of Funding Availability in November 2022.

VWMTF Program Schedule Phase 2: CEMEX-KEW letter of acknowledgement/interestin November 2022.

VWMTF Program Schedule Phase 3: CEMEX-KEW application submittal in November 2022

VWMTF Program Schedule Phase 4: FL DOEP review/approval of project application in January 2023.

VWMTF Program Schedule Phase 5: FL DOEP NZE locomotive grant (est. \$1.1MM) in February 2023.

FLDOEP-CEMEX Grant Review Phase 6: FLDOEP-CEMEX grant contract signing by March 2023.

CEMEX-KLW Equipment Specification Review Phase 7: April 2023

Purchase & Sale Agreement Phase 8: CEMEX-KLW Locomotive Tier 4 P&SA signing by April 2023.

KLW NZE Locomotive Delivery Phase 9: April 2024

Florida DOEP VWMTF Reimbursement to CEMEX Phase 10: July 2024



VWMTF Program Administered by the Florida DOEP

Project Description: Replacement of a 1957 built EMD SW-9 unregulated switcher locomotive to a Tier 5 Near Zero Emission KLW NZE15BE T4L switcher locomotive.

End-User: CEMEX Miami Krome Aggregate Quarry 8800 SW 177th Avenue Miami, Florida 33196

Existing Locomotive Description: Unregulated / uncontrolled switcher locomotive

Existing Locomotive Make: EMD

Existing Locomotive Model: SW-9

Existing Locomotive Unit Number: CEMEX Frame Serial Number 6066-2

Existing Locomotive Build Date: Original equipment build date of 1957

Existing Engine Make: EMD

Existing Engine Model: 12-567-CA unregulated / uncontrolled

Existing Engine Serial Number: 5787

Existing Engine Build Date: 1957 original engine build date and later rebuilt in kind in1962 as an uncontrolled / unregulated primary engine

Brake Horsepower: 1135

Hours of Usage: 5,000+ hours annually

Annual Fuel Usage: 19,600 gallons annually

Near Zero Emission Locomotive Description: EPA certified as Tier 4 compliant, and CARB verified through Executive Order to Tier 4 Near Zero Emission compliance and also compliant to CARB's proposed Tier 5 locomotive emission standards. These 2017 Tier 5 locomotive emissions standards were recently resubmitted in November 2022 for final review and adoption by the EPA in the first quarter of 2023.

Near Zero Emission Locomotive Make: Knoxville Locomotive Works

Near Zero Emission Locomotive Model: NZE15BE T4L repowered and remanufactured

Near Zero Emission Locomotive Unit Number: TBA

Locomotive Build Date: 2023

Engine Make: MTU

Engine Model: MTU-KLW 16V2000 S96

Engine Serial Number: TBD

Brake Horsepower Rating: 1560 (MTU)

Future Hours of Usage: 4,000 hours forecasted annually with utilization of the Automatic Engine Start-Stop (AESS) idle limiting feature of the Near Zero Emission locomotive.

Annual Fuel Usage: 13,000 gallons forecasted annually due to a 35% decrease in fuel consumption with the high-pressure common rail fuel injection system of the new engine and installation of the AESS device.

Funding Program: Requires a minimum of 1,000 hours of annual operational time of the locomotive during the latest 12-month period.

Funding Availability: FL DERA grant at 40% or estimated \$1,110,000 of the newly repowered and remanufactured locomotive cost at \$2,775,000 with belt pack operated remote control.

NZE Locomotive Delivery: 12-15 months from formalized notification to proceed.

Diesel Emissions Quantifier: Air Resources Board of California Protocol (see Exhibit I).

Capital Grant Funding Request: \$1,110,000 FL DOEP DERA 40% grant with 60% CEMEX match of \$1,665,000

Project Cost Effectiveness: \$5,964 per ton

VWMTF Program Schedule Phase 1: FL DOEP issues Notice of Funding Availability in November 2022.

VWMTF Program Schedule Phase 2: CEMEX-KEW letter of acknowledgement/interest in November 2022.

VWMTF Program Schedule Phase 3: CEMEX-KEW application submittal in November 2022

VWMTF Program Schedule Phase 4: FL DOEP review/approval of project application in January 2023.

VWMTF Program Schedule Phase 5: FL DOEP NZE locomotive grant (est. \$1.050MM) in February 2023.

FLDOEP-CEMEX Grant Review Phase 6: FLDOEP-CEMEX grant contract signing by March 2023.

CEMEX-KLW Equipment Specification Review Phase 7: April 2023

Purchase & Sale Agreement Phase 8: CEMEX-KLW Locomotive Tier 4-Tier 5 P&SA signing by April 2023.

KLW NZE Locomotive Delivery Phase 9: April 2024

Florida DOEP VWMTF Reimbursement to CEMEX Phase 10: July 2024

Certificate Issued To: Knoxville Locomotive Works (U.S. Manufacturer or Importer)Effective Date: 12/22/2021Mutham Matham	e Date: 2/2021 ion Date: N/A				
Engine Family Name (Remanufacturing Kit): NKLWK35.7XN4 Vehicle/Engine Category: Locomotive The rebuild kit includes: none Locomotive Model Years: 2022 to 2022 Models Covered: NZE15B_T4L, NZE14BE_T4L, NZE14B_T4L, NZE13B_T4L, NZE15BE_T4L, NZE13BE_T4L, NZE10BE_T4L, NZE10BE_T4L					
Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR 1033, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the remanufacturing kit which has been found to conform to applicable requirements and which may be utilized with only the following locomotive engines, by engine family, more fully described in the documentation required by 40 CFR 1033 and produced in the stated model year. Parties who install this remanufacturing kit must also ensure that the base engine contains the following parts, more fully described in the Application for Certification for this kit: none This certificate of conformity is conditional upon compliance of said manufacturer with the provisions of 40 CFR Part 1033, Subpart H. Failure to comply with these provisions may render this					

This certificate of conformity covers only those locomotive remanufacturing kits which conform in all material respects to the design specifications that applied to those kits more fully described in the Application for Certification required by 40 CFR 1033 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR 1033.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068.20 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR 1068. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR 1068.





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SE Series Locomotives Tier 3

- **NZE Series Locomotives Tier 4 Near Zero Emission**
- **EPA Tier 4 Emissions Certified**
- **CARB Near Zero Emissions Verified**

Near Zero Emissions U.S. EPA TIER 4 CERTIFIED





02

KLV Background:

The Gulf & Ohio Railways (G&O) was established in 1998, a holding company which at the time owned and operated 10 short line railroads. The primary function of KLW was to repair, requalify, maintain manage the existing Gulf and and **Ohio Railways EMD locomotive fleet.**



Growing KLW

Over time the Gulf & Ohio Railways sold many of its short line railroads, allowing KLW to do repairs and rebuilds for other short line, Class 1, industrial and government clients.

Since its establishment, KLW has modernized, rebuilt and remanufactured more than 650 locomotives for a wide variety of industries and locomotive end-users.



Original Equipment Manufacturer



In 2007, KLW made the initial transition from a locomotive maintenance and operations to becoming a locomotive original equipment manufacturer (O.E.M.).



Conventional switcher locomotives were in need of modernization. While the GEN SETS were an innovative introduction to displacing conventional smokestack locomotives, KLW realized there was an alternative single engine design that comparatively could achieve improved reliability performance and reduced maintenance costs.



With over a decade of past locomotive experience, KLW decided to develop the most environmentally efficient and operator friendly switch locomotive on the market. This was the beginning of the KLW SE Series product line of freight switchers and line haul units.













KLW SE SERIES

EASE OF USE

IMPROVED FUEL ECONOMY

LOW MAINTENANCE

PROVEN RELIABILITY

SINGLE ENGINE DESIGN

REMOTE DIAGNOSTICS

NEAR ZERO EMISSIONS





New Accessory Drive Assembly



Rebuilt AR10 Alternator

New MTU Engine

New ZF Gearbox

New Inertial Filter

New Fuel Tank

New KLW AR10 Adapter

Remanufactured Main Frame

New TMV Electrical Cabinet



KLW re-powers use previously unregulated locomotive cores by removing :

- **Drive Train System**
- Locomotive controls
- Radiators
- **Inertial filter**
- Air compressor
- **Generator/Alternator**
- **Auxiliary Generator**
- **Starting System**
- Batteries
- Old HVAC
- Exhaust System

Major electrical and mechanical upgrades include advanced electronic control systems, new pressurized and air filtered electrical cabinet and KLW-MTU engine and drive train system which results in higher tractive effort and bhp efficiency, enhanced performance and longer locomotive life.

Before





MTU Diesel Engines



MTU MANUFACTURING FACILITIES AIKEN, SOUTH CAROLINA

80



12 cylinder and 16 cylinder MTU engines which KLW uses for its locomotive models

MTU has produced diesel engines for heavy duty industrial use for nearly a century. Over 5,000 MTU engines have been installed in locomotives worldwide.

MTU Engines are relied upon in critical industries such as: marine, mining, oil & gas, agriculture and defense.

The models below operate at a nominal 1,800 RPM and are the lowest emitting engines in their horsepower class.

KLW uses Series 2000 and Series 4000 MTU engines from 1050 bhp to 3218 bhp. Engineered in Germany and manufactured in the United States.



Marine Proven, Railroad Ready

The single clutch spins in one direction and remains engaged in forward, reverse & neutral, only disengaging at engine shutdown.



09

ZF gearbox systems are commonly used with MTU engines in marine vessels.



The ZF 2:1 reduction gearbox assembly makes the MTU engine compatible with the EMD AR Series alternators.

Single multi-plate clutch engages after six-seconds, allowing the engine to start with virtually no load

No shifting necessary.





KLW AR10 Double Bearing Adapter

AR10 w/o adapter

0

Since the AR Series traction alternators were originally designed to attach to medium speed EMD engines, KLW designed a solution to connect the high speed MTU Engine to the medium speed EMD alternator through a ZF gearbox assembly at a 2:1 reduction ratio. **AR10 with patented adapter**

KLW then patented the double-bearing adapter with output shafts to integrate with the AR alternators. This is accomplished with Geislinger and Centa couplings.



KLW Accessory Drive Assembly – ADA

Polycarbonate chain belts and pulleys inside the ADA power the air compressor and auxiliary generator

The ADA is built on a steel skid mounted frame, allowing the entire unit to be installed in one contiguous piece

The MTU engine powers the ADA via a PTO drive shaft

> **18-2**4 kW auxiliary generator

SullAir rotary screw compressor generates 304 - 410 CFM worth of air at full speed rpm





TMV Traction and Engine Control Unit



Increased Traction =

The TMV system also prevents wheel slips from occurring which can increase tractive effort from 25% up to 70%.

KLW upgraded 3 locomotives with the TMV system and as a result the railroad could pull the same train that previously needed 5 conventional locomotives to perform the same duty cycle. 5





5 w/TMV 3

<image>

Near Zero Emissions Models in four and six axle configurations

NZE10BE 1050 bhp

NZE13BE 1300 bhp

NZE14BE 1450 bhp

NZE15BE 1560 bhp

NZE23BE&CE 2300 bhp

NZE20BE&CE 2000 bhp

NZE24BE&CE 2414 bhp

NZE22BE&CE 2200 bhp

NZE28BE&CE 2800 bhp

NZE32BE&CE 3218 bhp







SAN FRANCISCO PAY RAILROAD

1050 bhp Reduces emissions up to 98% Reduces fuel consumption up to 50% Increases starting tractive effort up to 60%





KLW NZE15BE T4L

1560 bhp Reduces emissions up to **98%** Reduces fuel consumption between **40-50%** Increases starting tractive effort up to **60%**



KLW NZE22BE T4L

V Longite Hirt

2200 bhp Reduces emissions over 98% Reduces fuel consumption up to 25-35% Increases starting tractive effort up to 50%

2250

KLWX

KLW20B





KLW NZE23BE DE T4L

2300 bhp Reduces emissions by over 98% Reduces fuel consumption up to 25-35% Increases starting tractive effort up to 50% 18





3218 bhp Reduces emissions by over 98% Reduces fuel consumption between 25-35% Increases starting tractive effort up to 50%

2010

SE32C

YVRR



A MODEL FOR ANY RAILROAD

Knoxville Locomotive Works is the first and ONLY O.E.M. to offer 56 singleengine Near Zero Emission locomotive models.

Ranging from 1050 bhp to 3218 bhp, the KLW SE NZE SERIES generate the world's cleanest engine emissions solutions and reliability performance for the freight locomotive industry.



THEKLVADVANTAGE



Attachment E

DERA Option (5.2.12)

Additional Information about the DERA Work Plan

The DERA work plan below, titled *Florida's Combined 2021 & 2022 DERA Grant Program*, was submitted to the U.S. Environmental Protection Agency (EPA) for the federal fiscal year 2022-2023, which begins October 1, 2022, and will end on September 30, 2023. This work plan was drafted and submitted with the intention of utilizing a portion of Florida's Beneficiary Mitigation Trust allocation, identified in Florida's Beneficiary Mitigation Plan as 15 percent of the total allocation, for various DERA State Grant Program projects.

This table below (which is excerpted from Florida's 2022 DERA work plan), shows the total amount of DERA funding provided by EPA in DEP's current grant.

	2021	2022
EPA Base Allocation	\$377,507.00	\$412,651.00
EPA Match Bonus (if applicable)	\$188,754.00	\$206,326.00
Voluntary Matching Funds (if applicable)	\$377,507.00	\$412,651.00
Mandatory Cost-Share	As required by category	As required by category
TOTAL Project Cost	\$943,768.00	\$1,031,628.00

Project Budget Overview

Florida's 2022 DERA work plan states the following: "With this application, the Department intends to use 2022 funds for large-scale projects, such as marine vessel repowering or replacement. At present, the project types to be funded during the 2022 budget cycle will focus on ports and other modes of commerce, primarily through marine engines and other on-road, nonroad, or rail options." Florida's adherence to this plan is evidenced in this funding request for a marine vessel diesel engine replacement project(s).

Based upon the information provided by the grant applicant for the proposed marine diesel repowering project, the availability of trust funds for DERA State Grant Program projects, and allowances for overmatching EPA's mandatory match requirement, Florida has determined that it is appropriate to increase the voluntary matching funds for the FY 2023 beyond the amount indicated in the state's 2022 DERA work plan to the amount sought in this funding request. As noted in Florida's DERA work plan, "Florida plans to utilize matching funds and potentially overmatching funds from the Volkswagen Mitigation Trust for Florida's state match. In addition, the Department will require that all project partners meet the minimum DERA cost share requirements."



2022 Diesel Emissions Reduction Act (DERA) State Grants

Work Plan and Budget Narrative Template

INSTRUCTIONS: States and territories applying for 2022 DERA State Grant funds should use this template to prepare their Work Plan and Budget Narrative.

Please refer to the 2021-2022 DERA State Grants Program Guide full program details, eligibility criteria and funding restrictions, and application instructions.

SUMMARY PAGE

Project Title: Florida's Combined 2021 & 2022 DERA Grant Program

Project Manager and Contact Information

Organization Name: Florida Department of Environmental Protection

Project Manager: Jeffery F. Koerner

Director, Division of Air Resource Management

Mailing Address: 2600 Blair Stone Rd. MS 5500 Tallahassee, FL 32399-2400

Phone: 850-717-9000

Fax: N/A

Email: jeff.koerner@floridadep.gov

Project Budget Overview:

	2021*	2022
EPA Base Allocation	\$377,507	\$412,651.00
EPA Match Bonus (if applicable)	\$188,754	\$206,326.00
Voluntary Matching Funds (if applicable)	\$377,507	\$412,651.00
Mandatory Cost-Share	As required by category	As required by category
TOTAL Project Cost	\$943,768	\$1,031,628.00

*If state participated in 2021

Project Period for 2021-2022 DERA State Grants

October 1, 2021 – September 30, 2023

Summary Statement

The Florida Department of Environmental Protection (Department) intends to use the available grant funding from program year 2021 and program year 2022 before September 30, 2023.

The Department is now applying for 2022 funding to be utilized in conjunction with 2021 funds as well as funds made available to the State of Florida from the Volkswagen settlement's Environmental Mitigation Trust (Trust). The Department intends to use funds from the Trust as the state's voluntary match.

With this application, the Department intends to use 2022 funds for large-scale projects, such as marine vessel repowering or replacement. At present, the project types to be funded during the 2022 budget cycle will focus on ports and other modes of commerce, primarily through marine engines and other on-road, nonroad, or rail options.

The Department maintains a website that provides the public with information on DERA programs and details past DERA-related projects in the state: <u>https://floridadep.gov/air/air-director/content/diesel-emissions-reduction-act-dera-florida</u>

SCOPE OF WORK

STATE/TERRITORY GOALS AND PRIORITIES:

Most air pollutants in Florida occur in concentrations well below the National Ambient Air Quality Standards (NAAQS), some can occur locally in concentrations that potentially affect the health of Florida's citizens. The criteria pollutants of greatest concern for mobile emissions are ground-level ozone and particulate matter, together with the precursors that form them (i.e., NO_X, SO₂, and volatile organic compounds [VOCs]). The use of legacy diesel-powered vehicles is a significant contributor to the total emissions that lead to ground-level ozone formation and increased particulate matter concentrations. Local impacts from diesel exhaust includes a range of hazardous air pollutants, which are an additional health concern.

According to the 2017 National Emission Inventory (NEI), Florida's total emissions of NO_X from all sources 447,440 tons.¹ The majority of these NO_X emissions came from mobile sources. These sources emitted 299,476 tons in 2017, approximately 67% of the total statewide NO_X emissions. In Florida, approximately 54% of all NO_X emissions (160,685 tons) are from diesel-powered mobile sources. Figure 1 shows the sources of NO_X emissions in Florida. Figure 2 shows the distribution of total NO_X emissions by county.

¹ EPA's 2014 NEI Data: <u>https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data</u>



Figure 1. Percentage Distribution by Sector for All NOX Emissions in Florida (2017)

Figure 2. Distribution by County for All NO_X Emissions in Florida (2017)



Figure 3 shows the main categories of NO_X emissions from diesel-powered mobiles sources. Figure 4 shows mobile sources of NO_X distributed by county. Of the 194,638 tons of NO_X emitted from diesel-powered mobile sources, the sources break down into the following specific subcategories:

- 85,782 tons from on-road diesel heavy-duty vehicles (i.e., tractor trailers);
- 46,217 tons from non-road diesel equipment (e.g., heavy forklifts);
- 16,743 tons from commercial marine vessels (e.g., cruise and container ships);
- 5,803 tons from on-road diesel light-duty vehicles (i.e., personal vehicles); and
- 5,719 tons from diesel-powered locomotives (e.g., switcher locomotives).

Figure 2. Percent Distributions of Diesel-Powered Mobile Source NOx Emissions (2017)





Figure 4. Distribution by County for Mobile Source NO_X Emissions in Florida (2017)

The 2017 NEI indicates that Florida's total emissions of fine particulate matter ($PM_{2.5}$) from mobile sources is 14,295 tons. Approximately 59 percent of this total is from diesel-powered mobile sources including:

- 4,349 tons from on-road diesel heavy duty vehicles;
- 3,305 tons from non-road diesel equipment;
- 372 tons from commercial marine vessels;
- 164 tons from diesel-powered locomotives; and
- 250 tons from on-road diesel light duty vehicles.

Florida's ambient monitoring network for $PM_{2.5}$ shows that there are no areas of the state exceeding either the annual or 24-hour $PM_{2.5}$ NAAQS.

The 2017 NEI indicates that Florida's total emissions of coarse particulate matter (PM_{10}) from mobile sources is 23,381 tons. Approximately 49 percent of this total is from diesel-powered mobile sources including:

- 7,087 tons from on-road diesel heavy duty vehicles;
- 7,087 tons from non-road diesel equipment;
- 392 tons from commercial marine vessels;
- 169 tons from diesel-powered locomotives; and
- 368 tons from on-road diesel light duty vehicles.

Florida's ambient monitoring network for PM_{10} shows that there are no areas of the state exceeding the 24-hour PM_{10} NAAQS.

Overall trends in the state's air quality are good. There does, however, remain work to address local impacts of emissions from older diesel engines, which are projected to remain a component of commercial and government operated vehicle fleets for many years. Encouraging voluntary measures with the aid of grant funding to address related air quality impacts is important to Florida's broader goal of improving air quality for the state's citizens and visitors.

Additionally, prioritizations for project-specific funding through the DERA program will be, to the greatest extent possible, based on project types not prioritized in the Department's Mitigation Plan through the Volkswagen Settlement. Florida's Mitigation Plan prioritizes School, Transit, and Shuttle Bus replacements (70 percent of funding), and the installation of Electric Vehicle Charging Infrastructure (15 percent of funding). The third and final priority is the state's participation in the DERA program, which represents the remaining 15 percent of funding from the Volkswagen Settlement. The Mitigation Plan specifies that the Department will prioritize replacement of diesel units with electric or alternative fuels where possible. Due to the disparity of upfront costs to purchase electric school and transit buses compared to diesel, and the goal to reduce NO_X to the greatest extent practicable, the Department will aim to select DERA projects with the greatest per project NO_X reduction when electric and/or alternative fuel replacement options are not possible. Marine vessel engine replacements and switcher locomotive replacements, along with certain nonroad repower options, have been proven to have the greatest per-project NO_X emissions reduction. Therefore, this next round of DERA funding will focus on port and/or other commerce related projects.

VEHICLES AND TECHNOLOGIES:

As of the date of this submittal, the Department has identified a need for port and other commerce related projects for this round of DERA funding. Through stakeholder engagement and recent success in funding a marine engine replacement project and port drayage trucks, the Department has identified the following port projects for consideration:

- Marine engines, including ferries, tugs, and pilot vessels
- Nonroad equipment
- Switcher locomotives
- Port drayage trucks
- Medium-duty and heavy-duty trucks
- Shorepower projects

The Department selected these projects based on the previously mentioned prioritizations in the Florida Mitigation Plan, as well as the recent success funding marine engine and port drayage truck replacement projects.

ROLES AND RESPONSIBILITIES:

The Department will work with entities identified during a Notice of Funding Availability to take place before the end of 2022. The Department may elect to use Trust Funds to leverage resources beyond the state voluntary match. As the lead agency designated by the Florida Governor under the Trust, the Department will be responsible for providing the incentive match from the Trust. All

cost sharing requirements with project partners will be evaluated to meet minimum DERA guidelines but may be increased depending on the extent of interest from project partners. The Department's DERA Program will consider asking project partners to increase their cost share amount which will allow for the possibility of more DERA project partners and ultimately more units being retrofitted, repowered, or replaced. The Department's Division of Air Resource Management will be responsible for managing the state's DERA program including contract management and purchasing. The Department's Bureau of Finance and Accounting within the Division of Administrative Services will submit to EPA grant drawdown requests after projects are completed.

TIMELINE AND MILESTONES:

The Department intends to identify a list of partners for the 2022 DERA program in late 2022. The Department will then develop grant agreements with the selected project partner or partners in late 2022 to early 2023. The Department expects this round of funding to follow this general timeline:

Next Round of DERA Project(s)

- Fall 2022 Execute grant agreements for 2022 DERA projects.
- Early 2023 Deadline for 2021 DERA project partners to select vendors for the project.
- May 2023 Department conducts program evaluation to ensure progress on selected project or projects.
- June 2023 2022 DERA project partner or partners complete all work under the grant agreement and provide all required documentation to the Department thereby becoming eligible for reimbursement. Department reimburses project partners for completed work pursuant to the grant agreement or agreements. Once reimbursements have been paid to the project partners, the Department will prepare and submit a reimbursement package to EPA.
- Fall 2023 Execute grant agreements for 2022 DERA projects.
- Early 2024 Deadline for FY 2023 project partners to select vendors for the project.
- May 2024 Department conducts program evaluation to ensure progress on selected project or projects.
- June 2024 FY 2023 project partner or partners complete all work under the grant agreement and provide all required documentation to the Department thereby becoming eligible for reimbursement. Department reimburses project partners for completed work pursuant to the grant agreement or agreements. Once reimbursements have been paid to the project partners, the Department will prepare and submit a reimbursement package to EPA.

DERA PROGRAMMATIC PRIORITIES:

Projects funded under the DERA grants will align with EPA's programmatic priorities of achieving significant reductions in diesel emissions exposure from engines operating in areas with greater local air quality concerns relating to diesel vehicle emissions. These areas include places where Port projects are found (i.e., dense urban settings on coastal waterways at which numerous Port commerce units operate). As of the date of this submittal, the Department is evaluating Port projects with potential to address emissions taking place on land and units in the

water. These emissions reductions will benefit port workers, and, at some ports, also benefit passengers of vessels which are based in the port. Additionally, most of Florida's ports are located in areas closer to the NAAQS for ozone.

EPA'S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS:

Florida's 2022 DERA grant program will fund mitigation projects consistent with EPA's Strategic Plan for DERA programs to reduce local and regional air pollution from criteria pollutants and air toxics. The Department will utilize EPA's Diesel Emissions Quantifier (DEQ – available at <u>www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq</u>), among other tools, to quantify the emission reductions for each project. The Department will also utilize DEQ-modeled outputs, including the number of engines replaced, and document related outreach and communication efforts to link activities under Florida's 2022 DERA grant program to EPA's Strategic Plan. The example of a potential project below shows the relative NO_X and PM reductions for a ferry vessel when repowered with engines that meet new standards.

Ferry Vessel (Four 1,800 HP Tier 0 engines with 1,250 hours of annual operation each)

- Eligible Unit: 54.862 tons/year of NO_X and 1.0703 tons/year of PM
- New Unit: 29.785 tons/year of NO_X and 0.4067 tons/year of PM
- Percent Reduced: 47% in NO_X and 62% in PM

SUSTAINABILITY OF THE PROGRAM:

The Department maintains a website that contains records related to past DERA-related projects: <u>https://floridadep.gov/air/air-director/content/diesel-emissions-reduction-act-dera-florida</u>.

The Department also published a website relating to the Trust: https://floridadep.gov/volkswagen

Throughout the administration of Florida's 2021 DERA State Grant program, the Department will maintain a publicly accessible website and repository of data and information obtained through various outreach and procurement related activities. The Department anticipates utilizing the DERA Option under the Volkswagen Partial Consent Decree over the duration of programmatic activities related to implementation of the Volkswagen Environmental Mitigation Trust. The Department expects that DERA-related projects may occur over multiple years, and the benefits of such projects will be compounded by association with larger-scale diesel emission reduction and NOX mitigation activities under the Volkswagen Environmental Mitigation Trust. The Department is committed to identifying, developing, and administering projects that maximize the environmental benefits that accrue through targeted diesel emission reduction efforts, consistent with the requirements of the Volkswagen Partial Consent Decree and DERA program. All projects funded through these programs will be documented and archived on a publicly available website, and they may be featured in targeted public communication efforts through web-based and conventional media outlets at both a local and state level.

BUDGET NARRATIVE

Budget Category	EPA Allocation	Mandatory Cost-Share	Voluntary Match (if applicable)		Line Total
			VW Mitigation Trust Funds	Other Funds	Line Totai
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	0	0	0	0	0
7. Other	618,977.00	TBD	\$412,651	0	\$1,031,628
8. Total Direct Charges (sum 1-7)	618,977.00	TBD	\$412,651	0	\$1,031,628
9. Indirect Charges	0	0	0	0	0
10. Total (Indirect + Direct)	618,977.00	TBD	\$412,651	0	\$1,031,628
11. Program Income					

2022 Itemized Project Budget

Explanation of Budget Framework

• Personnel

The Department does not intend to spend any DERA funds to support personnel expenses incurred during the administration of Florida's 2022 DERA State Grant program. Work associated with the DERA program will be assumed by current Department staff.

• Fringe Benefits

The Department does not intend to spend any DERA funds to cover fringe benefit costs incurred during the administration of Florida's 2022 DERA State Grant program.

• Travel

The Department does not intend to spend any DERA funds on travel costs incurred during the administration of Florida's 2022 DERA State Grant program. Travel and other costs associated with the Department's attendance at the Southeast Diesel Collaborative have been budgeted within Department's existing budget and will not be funded by the DERA program.

• Equipment

The Department intends to provide DERA funds (and associated Volkswagen Environmental Mitigation Trust Funds) though grant agreement relationships with program partners that have eligible projects under the DERA program. Once partners and projects have been identified, the state will comply with the state's procurement guidelines, if applicable. The Department will attempt to spend all funding on the purchase of equipment to replace old diesel equipment.

• Supplies

The Department does not intend to spend any DERA funds on supply costs incurred during the administration of Florida's 2022 DERA State Grant program.

• Contractual

The Department does not intend to spend any DERA funds on contractual costs incurred during the administration of Florida's 2022 DERA State Grant program.

• Other

The Department intends to spend DERA funds on equipment during the administration of Florida's 2022 DERA State Grant program.

• Indirect Charges

The Department does not intend to spend any DERA funds on indirect charges incurred during the administration of Florida's 2022 DERA State Grant program.

Administrative Costs Expense Cap

States and territories must demonstrate that no more than 15% of a state's or territory's total project costs are being used to cover administrative costs as identified in OMB Circular A-87 Appendix B (e.g. personnel, benefits, travel, supplies). Total project costs include the federal share as well as any cost-share provided by the state. However, Regions have the discretion to allow state matching funds to exceed the 15% cap if the state provides justification for unique circumstances. The 15% maximum does not include indirect cost rates or funds assigned to projects, and total cost for the budget period.

The Department does not intend to spend any DERA funding on administrative costs.

Matching Funds and Cost-Share Funds

States and territories must provide a detailed description of the source of funding for any voluntary match or mandatory cost-share funds included in the project budget, if applicable. Include details on when the match will be available for use. If applicable, include letters of financial support, which specifically indicate how supporting organizations will assist in the project.

See Sections V.D and X of the Program Guide for more information on the voluntary matching incentive and mandatory cost-share funds.

Florida plans to utilize matching funds and potentially overmatching funds from the Volkswagen Mitigation Trust for Florida's state match. In addition, the Department will require that all project partners meet the minimum DERA cost share requirements. As stated above, the Department may increase the level of cost share required by project partners. The Department will require that project partners meet all applicable cost-share requirements as specified in the State Clean Diesel Grant Program Information Guide.

Funding Partnerships

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

For more information on categorizing costs for funding partnerships, please refer to Section XIII of the Program Guide.

The Department does not anticipate activities that qualify under this heading.