

APPENDIX D-4
Beneficiary Eligible Mitigation Action Certification

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary State of Iowa

Lead Agency Authorized to Act on Behalf of the Beneficiary Iowa Department of Transportation
(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:	2017-2018 Diesel Emission Reduction Act (DERA) Option
Beneficiary's Project ID:	ADM-VOLK(001)--90-19 (EPA-DERA(001)--9K-18)
Funding Request No.	(sequential) 01
Request Type: (select one or more)	☐ Reimbursement ☒ Advance ☐ Other (specify): _____
Payment to be made to: (select one or more)	☒ 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): _____
Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1): Iowa's Beneficiary Mitigation Plan states that Iowa will use \$300,000/year of Volkswagen Trust Funds as a voluntary match for DERA.	
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2): Overall detail can be found in the attached DERA Work Plan. More specifically, this request focuses on: 1) replacing unregulated, 1985 engine model year marine diesel engines with 2018 Tier 3 diesel engines; 2) replacing unregulated, 2000 model engine year marine diesel engines with 2019 Tier 3 diesel engines; 3) replacing unregulated, 1999 engine model year marine diesel engines with 2018 Tier 3 diesel engines; 4) replacement of one 2003 diesel transit bus with one all-electric bus; 5) purchase and installation of electric block heaters on 20 locomotives; 6) purchase and installation of five electric plug-in infrastructure stations; 7) replacement of five 2006 diesel refrigerated straight trucks with five 2017 model year or newer EPA certified refrigerated straight trucks; and 8) purchase and installation of coolant heaters on 85 trucks. These projects should reduce air pollution exposure among vulnerable populations across the state. Estimated lifetime benefits are 44.191 short tons for NOx, 2.925 short tons for PM2.5, 3.930 short tons for HC, 10.784 short tons for CO, and 2436.5 short tons for CO2.	
Estimate of Anticipated NOx Reductions (5.2.3): According to EPA's Diesel Emissions Quantifier, the estimate of anticipated NOx reductions from these projects are 44.191 short tons (lifetime).	
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): Iowa Department of Transportation - Planning, Programming, and Modal Division	
Describe how the Beneficiary will make documentation publicly available (5.2.7.2). The public may access documents pursuant to Iowa Code, Chapter 22 and 761 I.A.C.4. In addition, information will be available on Iowa's VW website at https://www.iowadot.gov/vwsettlement .	
Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8). Generally, this is outlined in Attachment E, the DERA Work Plan, and the 2018 DERA Information Guide. Of the projects listed above in 5.2.2, 1) is up to 40% reimbursable, 2) is up to 40% reimbursable, 3) is up to 40% reimbursable, 4) is up to 45% reimbursable, 5) is up to 40% reimbursable, 6) is up to 30% reimbursable, 7) is up to 25% reimbursable, 8) is up to 25% reimbursable.	
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, the Iowa DOT emailed representatives from the National Park Service, U.S. Fish and Wildlife Service, and Department of Agriculture, providing a copy of the State Trust Agreement and informing them of the availability of the funds.	

If applicable, describe how the mitigation action will mitigate the impacts of NO_x emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

Projects were ranked and awarded based on counties with higher concentrations of mobile and non-point NO_x emissions, higher rates of asthma and heart failure, higher rates of poverty, higher rates of young and elderly populations.

ATTACHMENTS
(CHECK BOX IF ATTACHED)

- | | | |
|-------------------------------------|---------------------|---|
| ☒ | Attachment A | Funding Request and Direction. |
| ☒ | Attachment B | Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4). |
| ☒ | Attachment C | Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11). |
| ☒ | 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.] |
| ☒ | 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 State of Iowa, 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 7, 2026



Scott C. Marler
Director

Iowa Department of Transportation

[LEAD AGENCY]

for

State of Iowa

[BENEFICIARY]

ATTACHMENT B

ELIGIBLE MITIGATION ACTION MANAGEMENT PLAN INCLUDING DETAILED BUDGET AND IMPLEMENTATION AND EXPENDITURES TIMELINE

MANAGEMENT PLAN SCHEDULE AND MILESTONES

MILESTONE	COMPLETION DATE
Draft DERA Work Plan Due	June 4, 2018
Final Approved DERA Work Plan and Budget Submittal	June 25, 2018
Provide Notice of Availability of DERA funds	September 28, 2018
Project Period for FY 2018 DERA Begins	October 1, 2018
Quarterly Report Due	October 30, 2018
Participant Submits Application	November 9, 2018
Application Evaluation, Scoring and Ranking	December 20, 2018
Provide Written Approval of Participant Proposal	January 2, 2019
Quarterly Report Due	January 30, 2019
Prepare Agreements for Participants	February 10, 2019
Participant Enters into Contracts, Purchase Orders, etc.	February 14, 2019
Public Notification of Awarded Projects	March 15, 2019
Project Installation - Start	April 1, 2019
Quarterly Report Due	April 30, 2019
Quarterly Report Due	July 30, 2019
Monitoring and Oversight of Project Implementation	August 30, 2019
Project Installation - Complete	August 30, 2019
Participants provide detailed invoices for all claimed project costs, documentaion for emission reduction estimates, required certification documents to support reimbursement	September 20, 2019
Final Report Due	December 31, 2019

ATTACHMENT B

ELIGIBLE MITIGATION ACTION MANAGEMENT PLAN INCLUDING DETAILED BUDGET AND IMPLEMENTATION AND

BUDGET

Project Description	Project Participant	Project Total	Amount Funded by Trust	Amount Funded by EPA	Amount Funded by Project Participant
Replacement of two unregulated, 1985 model year marine diesel engines with two 2018 Tier 3	Newt Marine Services	\$696,010.00	\$102,448.38	\$140,931.62	\$452,630.00
Replacement of two unregulated, 2000 model year marine diesel engines with two 2019 Tier 3	Newt Marine Services	\$623,404.05	\$71,720.18	\$98,660.82	\$453,023.05
Replacement of two unregulated, 1999 model year marine diesel engines with two 2018 Tier 3	Newt Marine Services	\$673,266.70	\$101,101.37	\$139,078.63	\$433,086.70
Replacement of one 2003 diesel transit bus with one all-electric transit bus	Des Moines Area Regional Transit Authority	\$860,445.00	\$174,394.08	\$203,605.92	\$482,445.00
Purchase and install electric block heaters on 20 locomotives	Iowa Northern Railway Company	\$526,655.74	\$64,590.40	\$75,409.60	\$386,655.74
Purchase and install five remote plug-in electric charging stations	Burke Marketing Corporation	\$40,950.22	\$5,667.84	\$6,617.23	\$28,665.15
Replacement of five 2006 model year refrigerated straight trucks with new	Brown National Lease	\$500,050.00	\$57,675.77	\$67,336.73	\$375,037.50
Purchase and install fuel fired coolant heaters on 85 trucks	Anderson Erickson Dairy Company	\$107,054.46	\$11,135.35	\$13,000.57	\$82,918.54
Totals		\$4,027,836.17	\$588,733.37	\$744,641.12	\$2,694,461.68
Percentage		100.0%	14.6%	18.5%	66.9%

ATTACHMENT B
ELIGIBLE MITIGATION ACTION MANAGEMENT PLAN INCLUDING DETAILED BUDGET AND IMPLEMENTATION AND
EXPENDITURES TIMELINE

PROJECTED TRUST ALLOCATIONS

	2018
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$588,733.37
2. Anticipated Annual Cost Share	\$3,447,985.58
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$4,036,718.95
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$0.00
5. Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$588,733.37
6. Total Funding Allocated to for Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$588,733.37
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$21,201,737.70
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 7 minus line 6)	\$20,613,004.33

ATTACHMENT C

DETAILED PLAN FOR REPORTING ON ELIGIBLE MITIGATION ACTION IMPLEMENTATION

Consistent with 5.2.11 of the *Environmental Mitigation Trust Agreement for State Beneficiaries* (Trust), Beneficiaries must submit with their Appendix D-4 request for Eligible Mitigation Action funding a detailed plan for reporting on Eligible Mitigation Action implementation. The Iowa Department of Transportation (DOT) intends to achieve the Beneficiary Reporting Obligations as outlined with 5.3 of the Trust.

The Iowa DOT is devoted to carrying out the reporting requirements of the Trust, according to 5.3, Beneficiary Reporting Obligations, as described below:

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 of 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 Trusts public-facing website upon receipt.

Furthermore, on top of the semiannual reporting to the Trustee, the Iowa DOT will be issuing quarterly and final reports to the EPA during the project period (quarterly ends September 30, 2019 with final report due December 29, 2019), as required by the DERA FY 17-18 State Program Programmatic Terms and Conditions of Iowa DOT's U.S. EPA Assistance Amendment. The following is an excerpt from that amendment:

C. Quarterly Reporting and Environmental Results

Quarterly progress reports will be required. Quarterly reports are considered project status reports and will address the progress made achieving the work plan goals. In general, quarterly reports will include summary information on technical progress and expenditures, and planned activities for next quarter. A template for the quarterly report will be available at www.epa.gov/cleandiesel/clean-diesel-state-allocations. Quarterly reports are due according to the following schedule. If a due date falls on a weekend or holiday, the report will be due on the next business day.

April 1 – June 30 Reporting Period: report due date July 30

July 1 – September 30 Reporting Period: report due date October 30

October 1 – December 31 Reporting Period: report due date January 30

January 1 – March 31 Reporting Period: report due date April 30

If a project start date falls within a defined Reporting Period, the recipient must report for that period by the given due date. This quarterly reporting schedule shall be repeated for the duration of the award agreement.

D. Final Report:

The final project report will include all categories of information required for quarterly reporting, including a final, detailed fleet description. The final project report will also include a narrative summary of the project or activity, project results (outputs and outcomes) including final emissions benefit calculations, and the successes and lessons learned for the entire project. To the extent possible, final emission benefit calculations should be based on the actual number and type of technologies, vehicles, equipment and engines implemented under the award and actual vehicle miles traveled, idling and/or operating hours, and fuel use. If actual vehicle miles traveled, idling and/or operating hours, and fuel use are not available, the final report will include a detailed explanation of how these values are derived, as well as any assumptions or default values used, for the purposes of emissions benefit calculations. The final report will also detail the methodologies used for the emission benefit calculation.

For projects involving vehicle/engine/equipment replacement the recipient must provide in the final report: 1) Evidence that the replacement activity is an “early replacement,” and would not have occurred through normal attrition/fleet turnover (i.e. without the financial assistance provided by EPA) within three years of the project period start date. Supporting evidence can include verification that the vehicles or equipment being replaced have useful life left and fleet characterization showing fleet age ranges and average turnover rates per the vehicle or fleet owner’s budget plan, operating plan, standard procedures, or retirement schedule; 2) Evidence of appropriate scrappage (see E.9.4 below); and 3) Specification of the model years and the emission standard levels for PM and NOx, for both the engine being replaced and the new engine.

For projects that take place in an area affected by, or includes vehicles, engines or equipment affected by federal law mandating emissions reductions, the recipient must provide in the final report evidence that emission reductions funded with EPA funds were implemented prior to the effective date of the mandate and/or are in excess of (above and beyond) those required by the applicable mandate.

The final report shall be submitted to the EPA Project Officer within 90 days after the project period end date or termination of the assistance agreement. A template for the final report will be available at www.epa.gov/cleandiesel/clean-diesel-state-allocations.

ATTACHMENT D
DETAILED COST ESTIMATES FROM SELECTED OR POTENTIAL VENDORS FOR EACH PROPOSED
EXPENDITURE EXCEEDING \$25,000.

Consistent with 5.2.6 of the *Environmental Mitigation Trust Agreement for State Beneficiaries* (Trust), Beneficiaries must submit for each proposed expenditure exceeding \$25,000, detailed cost estimates from selected or potential vendors.

The Iowa DOT is devoted to carrying out the reporting requirements of the Trust, according to 5.2.6, as detailed in the following cost estimates:

1. Replacing unregulated, 1985 model engine year marine diesel engines with 2018 Tier 3 diesel engines (page 13)*;
2. Replacing unregulated, 2000 model engine year marine diesel engines with 2019 Tier 3 diesel engines (page 14)*;
3. Replacing unregulated, 1999 engine model year marine diesel engines with 2018 Tier 3 diesel engines (page 15)*;
4. Replacement of one 2003 diesel transit bus with one all-electric bus (pages 16)*;
5. Purchase and installation of electric block heaters on 20 locomotives (page 17)*;
6. Purchase and installation of five electric plug-in infrastructure stations (page 18)*;
7. Replacement of five 2006 diesel refrigerated straight trucks with five 2017 model year or newer EPA certified refrigerated straight trucks (pages 19-20)*;
8. Purchase and installation of coolant heaters on 85 trucks (page 21-22)*.

*Iowa Department of Transportation Universal Payment Voucher

Iowa Department of Transportation
Universal Payment Voucher
Contract Final (Federal Aid Only)

Voucher 733220
Abstract Date
Warrant

Voucher Date 8/6/20

Contract 22527
P.O.

Vendor SUNFLOWER ENTERPRISES INC

SUNFLOWER ENTERPRISES INC
5 JONES ST STE 2
DUBUQUE, IA 52001

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	6/30/20	1 FINAL	849000	860	010	U	P	\$0.00	\$140,931.62
DERA			Project: 9K18DERA100			Parcel:		Eq/Job #:	
0020	6/30/20	1 FINAL	849100	860	010	U	P	\$0.00	\$102,448.38
VW Match			Project: 9018VOLK001			Parcel:		Eq/Job #:	
Total:								\$0.00	\$243,380.00

Description

Engines Replacement Katie Ann

To reimburse Sunflower Enterprises, Inc. for work on:
Project #EPA-DERA(100)--9K-18, Agreement #2018-DERA-01

Engine Replacement\$696,010.00
Federal-aid Reimbursement (MAX \$243,380) to Date ...\$243,380.00
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS FINAL VOUCHER\$243,380.00

Approval Authority

Date

Claimant's Certification





I the within claimant do certify that the items for which payment is claimed were furnished for state business under authority of the law and the charges are reasonable, proper, and correct and no part of this claim has been paid.

Sign in ink: _____

Date: _____

Not required if original invoice is being presented for Payment.

Iowa Department of Transportation
Universal Payment Voucher
Contract Final (Federal Aid Only)

Voucher 733252
Abstract Date
Warrant

Voucher Date 8/6/20

Contract 22528
P.O.

Vendor SUNFLOWER ENTERPRISES INC

SUNFLOWER ENTERPRISES INC
5 JONES ST STE 2
DUBUQUE, IA 52001

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	6/30/20	1FINAL	849000	860	010	U	P	\$0.00	\$98,660.82
DERA			Project: 9K18DERA100			Parcel:		Eq/Job #:	
0020	6/30/20	1FINAL	849100	860	010	U	P	\$0.00	\$71,720.18
VW Match			Project: 9018VOLK001			Parcel:		Eq/Job #:	
Total:								\$0.00	\$170,381.00

Description

Engines Replacement - FOX Eldon

To reimburse Sunflower Enterprises, Inc. for work on:
Project #EPA-DERA(100)--9K-18, Agreement #2018-DERA-02

Engine Replacement\$623,404.05
Federal-Aid Reimbursement (MAX \$170,381) to Date\$170,381.00
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS FINAL VOUCHER\$170,381.00

Approval Authority

Date

Claimant's Certification

I the within claimant do certify that the items for which payment is claimed were furnished for state business under authority of the law and the charges are reasonable, proper, and correct and no part of this claim has been paid.

Sign in ink:

Date:

Not required if original invoice is being presented for Payment.

Iowa Department of Transportation
Universal Payment Voucher
Contract Final (Federal Aid Only)

Voucher 733257
Abstract Date
Warrant

Voucher Date 8/6/20

Contract 22529
P.O.

Vendor SUNFLOWER ENTERPRISES INC

SUNFLOWER ENTERPRISES INC
5 JONES ST STE 2
DUBUQUE, IA 52001

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	6/30/20	1FINAL	849000	860	010	U	P	\$0.00	\$139,078.63
DERA			Project: 9K18DERA100			Parcel:		Eq/Job #:	
0020	6/30/20	1FINAL	849100	860	010	U	P	\$0.00	\$101,101.37
VW Match			Project: 9018VOLK001			Parcel:		Eq/Job #:	
Total:								\$0.00	\$240,180.00

Description

Engines Replacement - Tigre

To reimburse Sunflower Enterprises, Inc. for work on:
Project #EPA-DERA(100)--9K-18, Agreement #2018-DERA-03

Engines Replacement\$673,266.70
Federal-aid Reimbursement (MAX \$240,180) to Date ...\$240,180.00
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS FINAL VOUCHER\$240,180.00

Approval Authority

Date

Claimant's Certification

I the within claimant do certify that the items for which payment is claimed were furnished for state business under authority of the law and the charges are reasonable, proper, and correct and no part of this claim has been paid.

Sign in ink: _____

Date: _____

Not required if original invoice is being presented for Payment.

Iowa Department of Transportation
Universal Payment Voucher
Contract Final (Federal Aid Only)

Voucher 830182
Abstract Date
Warrant

Voucher Date 12/21/20

Contract 22849
P.O.

Vendor DES MOINES REGIONAL TRANSIT AUTHORITY (DART)

DSM AREA REGIONAL TRANSIT AUTHORITY
620 CHERRY ST
DES MOINES, IA 50309

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	11/29/20	1 FINAL	849000	860	010	U	P	\$0.00	\$203,605.92
DERA			Project: 9K18DERA100			Parcel:		Eq/Job #:	
0020	11/29/20	1 FINAL	849100	860	010	U	P	\$0.00	\$174,394.08
VW Match			Project: 9018VOLK001			Parcel:		Eq/Job #:	
Total:								\$0.00	\$378,000.00

Description

Electric Bus Replacement

To reimburse Des Moines Area Regional Transit Agency for work on:
Project #2018-DERA-01, Agreement #19977

Vehicle/Equipment Replacement - Electric\$860,445.00
Federal-aid Reimbursement (MAX \$378,000) to Date\$378,000.00
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS FINAL VOUCHER\$378,000.00

Approval Authority

Date

Claimant's Certification



12-23-2020

I the within claimant do certify that the items for which
payment is claimed were furnished for state business
under authority of the law and the charges are
reasonable, proper, and correct and no part of this claim
has been paid.

Sign in ink: _____

Date: _____

Not required if original invoice is being presented for
Payment.

Page 1 of 1
Fiscal Year 2020

Iowa Department of Transportation
Universal Payment Voucher
Misc. (Federal Funds Only)

Voucher 564517
Abstract Date
Warrant

Voucher Date 11/4/19

Contract 21814
P.O.

Vendor IOWA NORTHERN RAILWAY COMPANY

IOWA NORTHERN RAILWAY CO
P O BOX 640

COPY

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	10/21/19	1 FINAL	849000	860	010	U	P	\$0.00	\$75,409.60
Electric Block Heaters			Project: 9K18DERA100			Parcel:		Eq/Job #:	
0020	10/21/19	1 FINAL	849100	860	010	U	P	\$0.00	\$64,590.40
VW Match			Project: 9018VOLK001			Parcel:		Eq/Job #:	
Total:								\$0.00	\$140,000.00

Description

Hostart Electric Block Heaters

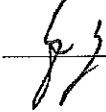
To reimburse Iowa Northern Railway Company for work on:
Project #EDP-DEA(100)--9K-19, Agreement #2017-DEA-04

Locomotive Idle Reduction\$526,655.74
Fed-aid Reimbursement (MAX \$140,000) to Date\$140,000.00
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS VOUCHER\$140,000.00

Approval Authority

Date

Claimant's Certification



1-23-2020

I the within claimant do certify that the items for which payment is claimed were furnished for state business under authority of the law and the charges are reasonable, proper, and correct and no part of this claim has been paid.

Sign in ink:

Date:

Not required if original invoice is being presented for Payment.

Iowa Department of Transportation
Universal Payment Voucher
Contract Final (Federal Aid Only)

Voucher 564522
Abstract Date
Warrant

Voucher Date 11/4/19

Contract 21816
P.O.

Vendor BURKE CORPORATION

BURKE CORPORATION
PO BOX 209
NEVADA, IA 50201

COPY

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	10/7/19	1 FINAL	849000	860	010	U	P	\$0.00	\$6,617.23
Electrified Parking Space			Project: 9K18DERA100			Parcel:		Eq/Job #:	
0020	10/7/19	1 FINAL	849100	860				\$0.00	\$5,667.84
			Project: 9018VOLK001			Parcel:		Eq/Job #:	
Total:								\$0.00	\$12,285.07

Description

Electrified Parking Space

To reimburse Burke Marketing Corporation for work on:
Project #EPA-DEA(100)--9K-18, Agreement #2017-DEA-03

Electrified Parking Space\$40,950.22
Fed-aid Reimbursement (MAX \$15,000) to Date\$12,285.07
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS FINAL VOUCHER\$12,285.07

Approval Authority

Date

Claimant's Certification



1-23-2020

I the within claimant do certify that the items for which payment is claimed were furnished for state business under authority of the law and the charges are reasonable, proper, and correct and no part of this claim has been paid.

Sign in ink: _____

Date: _____

Not required if original invoice is being presented for Payment.

Iowa Department of Transportation
Universal Payment Voucher
Contract Final (Federal Aid Only)

Voucher 564484
Abstract Date
Warrant

Voucher Date 11/4/19

Contract 21770
P.O.

Vendor BROWN TRUCK LEASING COMPANY DBA BROWN NATIONALEASE

BROWN NATIONALEASE
11229 AURORA AVE
URBANDALE, IA 50322

2019

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	8/6/19	1 FINAL	849000	860	010	U	P	\$0.00	\$67,336.73
Vehicle/Equip Replacement			Project: 9K18DERA100			Parcel:		Eq/Job #:	
0020	8/6/19	1 FINAL	849100	860	010	U	P	\$0.00	\$57,675.77
VW Match			Project: 9018VOLK001			Parcel:		Eq/Job #:	
Total:								\$0.00	\$125,012.50

Description

Food Service Repower

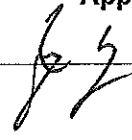
To reimburse Brown Nationalease for work on:
EDP-DERA(100)--9K-18, Agreement #2017-DERA-02

Vehicle/Equip Replacement - Diesel Fuel\$137,500.00
Fed-aid Reimbursement (MAX \$137,500) to Date\$125,012.50
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS FINAL VOUCHER\$125,012.50

Approval Authority

Date

Claimant's Certification



1-23-2020

I the within claimant do certify that the items for which
payment is claimed were furnished for state business
under authority of the law and the charges are
reasonable, proper, and correct and no part of this claim
has been paid.

Sign in ink: _____

Date: _____

Not required if original invoice is being presented for
Payment.

REBATE CLAIM FOR REIMBURSEMENT OF DIESEL EMISSION REDUCTION ACT (DERA) PROGRAM PROJECT COSTS

Claim Date: 08/16/19 Iowa DOT Project Number: EPA-DERA(100)—9K-18

Project Sponsor: Brown Nationalease Agreement Number: 2017-DERA-02

City: Des Moines County: POLK

Project Name: Food Service Repower

1	Maximum DERA funding payable per the Iowa DOT agreement (if applicable):	\$137,500.00
2	Local/Other Contribution (if applicable):	\$0.00
3	Total project cost:	\$137,500.00

Solution Categories	Total Project Cost <i>[A]</i>	DERA Reimbursement Rate	Eligible DERA Reimbursement Amount <i>[B]</i>
4 Total costs paid for Exhaust Control Retrofit (if approved):		100%	\$0.00
5 Total costs paid Engine Upgrade/Remanufacture (if approved):		40%	\$0.00
6 Total costs paid Highway Idle Reduction (if approved):		25%	\$0.00
7 Total costs paid Locomotive Idle Reduction (if approved):		40%	\$0.00
8 Total costs paid Marine Shore Power (if approved):		25%	\$0.00
9 Total costs paid Electrified Parking Space (if approved):		30%	\$0.00
10 Total costs paid Engine Replacement - Diesel or Alternative Fuel (if approved):		40%	\$0.00
11 Total costs paid Engine Replacement - Low NOx (if approved):		50%	\$0.00
12 Total costs paid Engine Replacement - All-Electric (if approved):		60%	\$0.00
13 Total costs paid Vehicle/Equipment Replacement - Diesel or Alternative Fuel (if approved):	\$500,050.00	25%	\$125,012.50
14 Total costs paid Vehicle/Equipment Replacement - Low NOx (if approved):		35%	\$0.00
15 Total costs paid Vehicle/Equipment Replacement - All-Electric (if approved):		45%	\$0.00
16 Total costs paid Clean Alternative Fuel Conversion (if approved):		40%	\$0.00
17 DERA Reimbursement Value	DERA Fund Reimbursement		\$125,012.50

ALL BACKUP DOCUMENTATION IS INCLUDED FOR COSTS BEING CLAIMED FOR REIMBURSEMENT, per the Agreement.

I hereby certify that all eligible project activities for which reimbursement is requested have been paid in full and completed in compliance with the project agreement.

Brown Nationalease 8/30/2019

Project Sponsor Date

I certify that the items claimed for payment are proper and true and that no part of this claim has been paid by the Iowa DOT.

 President

(Sign in Ink) Title

Make Check Payable to:

Project Sponsor Brown Nationalease

Mailing Address:
11229 Aurora Ave., Urbandale, IA 50322

Return/mail signed original to: Iowa Department of Transportation, Systems Planning Bureau, 800 Lincoln Way, Ames, Iowa 50010

Iowa Department of Transportation
Universal Payment Voucher
Contract Final (Federal Aid Only)

Voucher 590153
Abstract Date
Warrant

Voucher Date 12/9/19

Contract 21874
P.O.

Vendor ANDERSON ERICKSON DAIRY ANDERSON ERICKSON DAIRY

ANDERSON ERICKSON DAIRY
ANDERSON ERICKSON DAIRY
2420 E UNIVERSITY
DES MOINES, IA 50317

TOP

Line	Invoice Date	Invoice Number	Cost Center	Obj	Fun	R/ U	P/ N	Retained	Amount
0010	12/3/19	1 FINAL	849000	860	010	U	P	\$0.00	\$13,000.57
Highway Idle Reduction			Project: 9K18DERA100		Parcel:		Eq/Job #:		
0020	12/3/19	1 FINAL	849100	860	010	U	P	\$0.00	\$11,135.35
VW Match			Project: 9018VOLK001		Parcel:		Eq/Job #:		
Total:								\$0.00	\$24,135.92

Description

Highway Idle Reduction

To reimburse Anderson Erickson Dairy for work on:
Project #EPA-DEA(100)--9K-18, Agreement #2017-DEA-01

Highway Idel Reduction\$96,543.68
Federal-aid Reimbursement (MAX \$38,500) to Date\$24,135.92
Less Previously Reimbursed\$ 0.00
AMOUNT DUE THIS FINAL VOUCHER\$24,135.92

Approval Authority

Date

Claimant's Certification



1-27-2020

I the within claimant do certify that the items for which payment is claimed were furnished for state business under authority of the law and the charges are reasonable, proper, and correct and no part of this claim has been paid.

Sign in ink:

Date:

Not required if original invoice is being presented for Payment.

Claim Date:	<u>08/22/19</u>	Iowa DOT Project Number:	<u>EPA-DEA(100)--9K-18</u>
Project Sponsor:	<u>Anderson Erickson Dairy</u>	Agreement Number:	<u>2017-DEA-01</u>
City:	<u>Des Moines</u>	County:	<u>Polk</u>
Project Name:	<u>EPA-DEA(100)--9K-18</u>		

1	Maximum DERA funding payable per the Iowa DOT agreement (if applicable):	\$38,500.00
2	Local/Other Contribution (if applicable):	\$0.00
3	Total project cost:	\$38,500.00

Solution Categories		Total Project Cost [A]	DERA Reimbursement Rate	Eligible DERA Reimbursement Amount [B]
4	Total costs paid for Exhaust Control Retrofit (if approved) :	\$0.00	100%	\$0.00
5	Total costs paid Engine Upgrade/Remanufacture (if approved) :	\$0.00	40%	\$0.00
6	Total costs paid Highway Idle Reduction (if approved) :	\$107,054.46	25%	\$26,763.62
7	Total costs paid Locomotive Idle Reduction (if approved) :	\$0.00	40%	\$0.00
8	Total costs paid Marine Shore Power (if approved) :	\$0.00	25%	\$0.00
9	Total costs paid Electrified Parking Space (if approved) :	\$0.00	30%	\$0.00
10	Total costs paid Engine Replacement - Diesel or Alternative Fuel (if approved) :	\$0.00	40%	\$0.00
11	Total costs paid Engine Replacement - Low NOx (if approved) :	\$0.00	50%	\$0.00
12	Total costs paid Engine Replacement - All-Electric (if approved) :	\$0.00	60%	\$0.00
13	Total costs paid Vehicle/Equipment Replacement - Diesel or Alternative Fuel (if approved) :	\$0.00	25%	\$0.00
14	Total costs paid Vehicle/Equipment Replacement - Low NOx (if approved) :	\$0.00	35%	\$0.00
15	Total costs paid Vehicle/Equipment Replacement - All-Electric (if approved) :	\$0.00	45%	\$0.00
16	Total costs paid Clean Alternative Fuel Conversion (if approved) :	\$0.00	40%	\$0.00
17	DERA Reimbursement Value	DERA Fund Reimbursement		\$26,763.62

I hereby certify that all eligible project activities for which reimbursement is requested have been paid in full and completed in compliance with the project agreement.

9-13-19
Date

I certify that the items claimed for payment are proper and true and that no part of this claim has been paid by the Iowa DOT.

(Sign in ink)

Title

Project Sponsor _____ Anderson Erickson Dairy

Return/mail signed original to: Iowa Department of Transportation, Systems Planning Bureau, 800 Lincoln Way, Ames, Iowa 50010

ATTACHMENT E
DERA OPTION (5.2.12)

Consistent with 5.2.12 of the *Environmental Mitigation Trust Agreement for State Beneficiaries (Trust)*, Beneficiaries may use its DERA proposal as support for its funding request for those Eligible Mitigation Actions funded through the DERA Option.

The following pages consist of the Iowa DOT's Fiscal Year 2017-2018 State Clean Diesel Grant Program Work Plan and Budget Narrative.

FISCAL YEAR 2017-2018

STATE CLEAN DIESEL GRANT PROGRAM

WORK PLAN AND BUDGET NARRATIVE TEMPLATE

SUMMARY PAGE

Project Title: Diesel Vehicle Emissions Reductions in Iowa

Project Manager and Contact Information

Organization Name: Iowa Department of Transportation

Project Manager: Angela L. Poole

Mailing Address: 800 Lincoln Way, Ames, Iowa 50010

Phone: 515-239-1351

Fax: N/A

Email: angela.poole@iowadot.us

Project Budget Overview:

	FY 2017*	FY 2018
EPA Base Allocation	\$233,504	\$275,123
State or Territory Matching Funds (if applicable)	\$300,000	\$300,000
EPA Match Incentive (if applicable)	\$116,752	\$137,562
Mandatory Cost-Share	\$	\$
TOTAL Project	\$650,256	\$712,685

Project Period

October 1, 2018 – September 30, 2019

Summary Statement

The Iowa Department of Transportation (Iowa DOT) will create and implement a process that will allow profit, nonprofit, and public entities that own or operate diesel fleets and equipment in all 99 counties to receive funding for diesel emission reduction projects in FY 2017-2018. Projects will need to implement the most cost-effective strategies that result in the greatest emissions reductions consistent with the funding available. The state currently has two websites that detail past DERA State Clean Diesel Program projects. One website is located at www.iowadnr.gov/dera and is maintained by the Iowa Department of Natural Resources. This website lists projects that were completed with the 2016 DERA program. The 2017 and 2018 DERA programs are administered by the Iowa DOT and its website is located here: <https://www.iowadot.gov/dera>. Links are available to help the user navigate from one site to the other.

SCOPE OF WORK

STATE/TERRITORY GOALS AND PRIORITIES

Mobile sources emit various pollutants including carbon monoxide (CO), carbon dioxide (CO₂), particulate matter (PM), nitrogen oxides (NO_x), volatile organic compounds (VOC), also referred to as hydrocarbons (HC), and various other air toxics. Mobile source emissions are contributors to high fine particulates (PM_{2.5}) background levels and are responsible for over fifty percent (50%) of all NO_x emissions. NO_x emissions are formed primarily due to fuel burning at a high temperature in a vehicle engine. Hydrocarbons result from incomplete fuel combustion and from fuel evaporation. Ground-level ozone, a serious air pollutant is formed by reactions involving hydrocarbons and nitrogen oxides in the presence of sunlight.

Air quality nonattainment areas are those that do not meet the National Ambient Air Quality Standards (NAAQS) of the 1990 Clean Air Act Amendments (CAAA) with a focus on VOCs, NO_x, CO, and under certain conditions, PM_{2.5} and PM₁₀. Air quality maintenance areas are former nonattainment areas that are now in compliance with the NAAQS. Iowa currently has no designated nonattainment or maintenance areas for transportation-related air pollution.

Reducing Pollution through Diesel Reduction Strategies. While federal standards continue to ensure a reduction of emissions from newer diesel engines; older, dirtier diesel engines still remain in service and continue to emit unrestricted levels of air pollution. Iowa's state regulations are not allowed by state statute to be more stringent than federal standards for vehicles, and Iowa does not have a state regulatory program for mobile source emissions. Creating emission reduction programs and funding opportunities can aid in reducing the levels of ozone, PM, and other pollutants in areas of concern and improve air quality in higher population density areas where at-risk populations (elderly, poor health, children) live, work, and play.

Reducing diesel exhaust is an important strategy in helping lower pollutants across Iowa, as well helping to ensure Iowa continues to stay in attainment with the NAAQS.

VEHICLES AND TECHNOLOGIES

Eligible Entities. Funding for diesel emission reduction projects is available for profit, nonprofit, and public entities that own or operate diesel fleets and equipment in the state of Iowa.

Eligible Diesel Vehicles, Engines, and Equipment. Eligible on-road or non-road vehicles and equipment may include:

- School Buses;
- Medium-duty or Heavy-duty Transit Buses;
- Medium-duty or Heavy-duty Trucks (defined as Class 5 through Class 8);
- Marine Vessels;
- Locomotives; and
- Non-road engines, equipment, or vehicles used in:

- Construction;
- Handling of cargo;
- Agriculture; or
- Energy production (including stationary generators or pumps)

Eligible Diesel Reduction Strategies

Exhaust Control Devices

- Exhaust control includes pollution control devices installed in the exhaust system or systems that include crankcase emission control.
- The type(s) of exhaust control technology being used must be included on the list of EPA verified technologies (<https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>) or CARB verified technologies (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>) at the time of proposal submission to the EPA. The exhaust control can only be used on the vehicle/engine identified on the list and used only in the manner specified.
- If diesel particulate filters (DPF) is the exhaust control technology being used, it is highly recommended that all vehicles being considered have the exhaust temperature data logged to verify that the technology can indeed be placed on the vehicle.
- Funding Restrictions: Able to fund up to 100% of the cost (labor and equipment) for an eligible verified emission control.

Verified Idle Reduction Technologies

- Idle reduction is considered to be a “technology or device that reduces unnecessary idling of diesel vehicles or equipment or is designed to provide services (such as heat, air conditioning, and/or electricity) to vehicles and equipment that would otherwise require the operation of the main drive or auxiliary engine(s) while the vehicle is temporarily parked or remains stationary.”
- A list of eligible, EPA verified idle reduction technologies is available at: <https://www.epa.gov/verified-diesel-tech/smartway-technology>. The type of technology proposed for funding must exist on the list at the time of application. The actual idle reduction technologies must be used only for the vehicle/engine applications specified on the list.
- Funding Restrictions:
 - **Locomotives:** Able to fund up to 40 percent of the cost (labor and equipment) of verified eligible locomotive idle reduction technologies.
 - **Electrified Parking Spaces:** Able to fund up to 30 percent of the cost (labor and equipment) of eligible electrified parking space, also known as truck stop electrification, technologies.
 - **Marine Shore Power Connection Systems:** Able to fund up to 25 percent of the cost (labor and equipment) of eligible marine shore power connection systems, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional.

- **Highway Idle Reduction Technologies:** Able to fund up to 25 percent of the cost (labor and equipment) of eligible verified idle reduction technologies on long-haul trucks and school buses.

Aerodynamic Technologies

- Long haul Class 8 trucks can be retrofitted with aerodynamic trailer fairings or the fairings can be provided as new equipment.
- A complete list of EPA verified aerodynamic technologies is available at <https://www.epa.gov/verified-diesel-tech/smartway-verified-list-aerodynamic-devices>. If selected, the actual technologies used must be specifically named on the list at the time of acquisition and used only for the vehicle/engine applications specified on the list, in order to be eligible for funding.
- Funding Restrictions: Able to fund up to 100% of cost (labor and equipment) for verified aerodynamic technologies installed on long haul Class 8 trucks only if the technology is combined on the same vehicle with a new eligible verified exhaust control as defined above. Stand-alone aerodynamic technologies are not allowed for funding.

Low Rolling Resistance Tires

- Certain tire models can provide a reduction in NOx emissions and fuel savings, relative to the “standard” new tires for long haul Class 8 trucks, when used on all axles.
- A list of eligible low rolling resistance tires is available at: <https://www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-lrr-new-and-retread-tire>. If selected, the actual tires used must be specifically named on the list at the time of acquisition and used only for the vehicle/engine applications specified on the list in order to be eligible for funding.
- Funding restrictions: Able to fund up to 100% of cost (labor and equipment) for verified low rolling resistance tires installed on long haul Class 8 trucks, only if the technology is combined on the same vehicle with a new eligible verified exhaust control as defined above. Stand-alone low rolling resistance tires are not allowed for funding. Low rolling resistance tires are not eligible for funding if they have previously been installed on the truck.

Cleaner Fuels

- Cleaner fuels include, but are not limited to biodiesel, diesel fuel additives verified by EPA or CARB, compressed natural gas, propane and other certified alternative fuels.
- Funding restrictions: Stand-alone cleaner fuel use technologies are not allowed for funding. The state is able to fund the cost differential between the cleaner fuel and conventional diesel fuel if that cleaner fuel is used in combination with the following on the same vehicle:
 - a new eligible verified exhaust control;
 - an eligible clean alternative fuel conversion;
 - an eligible engine upgrade;
 - an eligible certified engine replacement; or
 - an eligible certified vehicle/equipment replacement.

Certified Engine Replacement

- An engine replacement includes replacing an existing engine with a newer, cleaner engine that is certified to a more stringent set of engine emission standards. Replacements include:
 - Diesel engine replacement with an engine certified for use with diesel or a clean alternative fuel;
 - Diesel engine replacement with an electric power source (grid, battery, or fuel cell);
 - Diesel engine replacement with an all-electric (i.e., zero-emission); and
 - Diesel engine replacement with an electric generator.
- Proposals for repowers should include the pre- and post- project standard emission levels of the engines to be repowered, in order to ensure that the repower will result in a net emissions reduction.
- Repowered vehicle, engine or equipment must continue to perform the same function as before the repower.
- The replacement engine must be of similar horsepower as the engine being replaced. Horsepower increases of more than 25 percent will require specific approval by EPA prior to purchase.
- Funding Restrictions: Funding percentages are based on replacement type.
- Early attrition and permanent disablement/scrappage requirements are enforced.

Vehicle and Equipment Replacement

- Non-road and highway diesel vehicles can be replaced with newer, cleaner vehicles that operate on diesel or alternative fuels and use engines certified by EPA to meet a more stringent set of engine emission standards.
- Locomotives, non-road diesel vehicles and equipment, as well as highway diesel vehicles and buses, must be powered by a 2017 model year or newer EPA certified engine.
- Drayage vehicles powered by a 2012 model year or newer certified engine.
- Replacement projects can include the replacement of diesel vehicles with newer, cleaner diesel, electric (grid, battery or fuel cell), hybrid or alternative fuel vehicles. All-electric (i.e. zero emission) vehicles do not require EPA certification.
- The replacement vehicle must be of the same type and similar gross vehicle weight rating or horsepower as the vehicle being replaced. Horsepower increases of more than 25 percent will require specific approval by EPA prior to purchase.
- The replacement vehicle must perform the same function as the vehicle that is being replaced
- Replacement vehicles cannot be used to increase the size of the organization's fleet.
- Funding Restrictions: Funding percentages are based on the type of replacement vehicle.
- Early Attrition & Permanent Disablement/Scrappage requirements are enforced.

Clean Alternative Fuel Conversions:

- Aftermarket clean alternative fuel conversions involve altering the conventional, original equipment manufacturer (OEM) highway diesel vehicles and engines to operate on alternative fuels such as propane or natural gas.

- Conversion kits must be on EPA’s lists of “Certified Conversion Systems for New Vehicles and Engines” and “Conversion Systems for Intermediate-Age Vehicles and Engines.”
- Conversion systems for engine model years 1995-2006 must achieve at least a 30% NOx reduction and a 10% PM reduction from the applicable certified emission standards of the original engine.
- Conversion systems for engine model years 2007-2009 must achieve at least a 20% NOx reduction with no increase in PM from the applicable certified emission standards of the original engine.
- Funding Restrictions: Able to fund up to 40 percent of the cost (labor and equipment) of an eligible, certified clean alternative fuel conversion.

ROLES AND RESPONSIBILITIES

In an effort to reduce diesel emissions both inside and outside the vehicles, the Iowa DOT will create a competitive grant process, select eligible entities as project partners and ensure implementation of the most cost-effective strategies that result in the greatest emissions reductions consistent with the funding available.

Project partners cannot be identified at this time as eligible entities have not been selected. Partners may include profit, nonprofit, and public entities that own or operate diesel fleets and equipment in the state of Iowa. Each project partner will assign a specific contact who will be responsible for determining the vehicles that will be included, the appropriate strategy for diesel emissions reduction, the technologies to use, etc. The specific project partner contact will manage the project activities and logistics to ensure timely, appropriate completion of the project and general reports and updates to the Iowa DOT.

The Iowa DOT will select eligible entities, write and manage all agreements, handle oversight of the entire federal grant award, and will submit all quarterly and final reports.

Project Description. Projects will need to implement the most cost-effective strategies that result in the greatest emissions reductions consistent with the funding available.

Interested entities will be required to submit a plan identifying the strategy that makes the most sense for their diesel engine operations. The plan submitted must:

- Identify the type of diesel reduction strategy.
- Identify the type of vehicle or equipment. Information will need to include (but is not limited to) year, make/model, VIN #, and useful life;
- Give priority to the most used and oldest, highest emitting vehicles or equipment to optimize emissions reductions;
- Give priority to vehicles or equipment that generally serve areas with higher population density and a higher percentage of at-risk populations; and
- Implement the most cost-effective strategies that result in the greatest emissions reductions consistent with the funding available.

The Iowa DOT will use established evaluation criteria and will have the discretion to fund only the most effective components of the plans selected for reimbursement. Successful applicants will be required to sign an agreement with the Iowa DOT, purchase and install the technology/equipment per the award agreement and be reimbursed for eligible expenses.

Specific Requirements. Eligible entities must understand and be willing to agree with all requirements as they relate to specifics of the diesel reduction strategies, early attrition policies, and disablement. A guidebook is available on the Iowa DOT's website that outlines the program (https://iowadot.gov/dera/pdfs/DERA_Grant_Program_Info_Guide.pdf) and will be updated as needed.

Evaluation Criteria. The evaluation criteria will include items such as:

- Projected amount of emissions reduction;
- Proximity to sensitive populations;
- Priority county locations (air quality concerns);
- Cost effectiveness (dollars per amount of emissions reduced); and
- Expected useful life of the emissions reduction strategy.

Funding and Match Requirements. Participating project partners will be eligible to receive cost (labor and equipment) reimbursement for their projects. The Iowa DOT will reimburse organizations, dependent on their project, up to the percentages outlined in the DERA Program Guide.

A cost will not be considered incurred until the funded technology and/or equipment has been received and accepted by the organization. Request for reimbursement shall include documentation to show that the technology/equipment has been received and installed, that disablement has occurred (if necessary), that all agreement requirements have been met, and that the expenses have been incurred and paid by the participating organization.

Matching funds are required for all projects that are not eligible for 100 percent reimbursement. Required matches must be monetary. Participating organizations may provide additional voluntary match, and if used, must enhance and expand the proposed project. Voluntary matches can be monetary or in-kind.

TIMELINE AND MILESTONES

Major Milestones	Completion Dates
Draft Grant Work Plan Due to EPA Regional Office	June 4, 2018
Final Approved Work Plan and Budget Submittal to EPA	June 25, 2018
Request for Grant Applications from Participating Organizations	August 1 – September 30, 2018
Project Period for FY 2018 Begins	October 1, 2018
Iowa DOT Evaluates Applications	October 2018
Prepare Agreement(s) between Iowa DOT and Participating Organization	November 1 – 15, 2018
Participating Organization Project Begins	December 1, 2018
Public Notification of Projects on Iowa DOT's DERA website	60 days from agreement execution
Quarterly Reporting Due to EPA	Ongoing
Organization Project Completed	September 15, 2019
Final Reporting due to EPA	December 31, 2019

DERA PROGRAMMATIC PRIORITIES

Priority Location. Areas in proximity to major transport routes or terminals, and areas which generate large amounts of truck traffic or school bus depots/yards (e.g. parking areas and/or garages where school buses are stored and maintained, or where school buses queue) tend to be locations where a disproportionate quantity of air pollution from diesel fleets occurs. Projects to decrease the diesel emissions within one or more of these seven counties would help to alleviate the disproportionate quantity of air pollution.

Public Health Benefits. Because Iowa has historically not had air pollution concerns, the general population thinks of air quality in terms of odors and visibility--not its impact on people's health. Ground-level ozone causes health problems such as difficulty breathing, lung damage, and reduced cardiovascular functioning. Scientific studies have linked fine particle matter with a series of significant health problems such as respiratory related hospital admissions and emergency room visits, aggravated asthma, and acute respiratory symptoms - including aggravated, coughing and difficult or painful breathing.

Reducing NO_x, HC, PM_{2.5}, and other pollutants and exposure to these pollutants through diesel emission reductions can help improve health benefits. It could also potentially decrease the cost of health care for asthmatics and high-risk populations, such as children and the elderly.

Cost-effectiveness. Actual cost effectiveness will in part be dependent on the specific strategies, manufacturer, technologies and applications involved in the program. Priority will be given to the oldest, highest emitting vehicles and equipment to optimize emissions reductions and associated cost-effectiveness of the reductions.

Verified Technologies. For any diesel engine operated vehicles being selected for retrofit technologies, the participating organizations will be required to use technologies from a list of EPA verified technologies (<https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>) or CARB verified technologies (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>).

Replacement vehicles will not be used to increase the size of fleets and must be early attrition projects. The new vehicle or equipment will be required to replace that of the same type and similar gross vehicle weight rating or horsepower and perform the same function. Replaced engines, vehicles, or equipment will be permanently disabled and documentation showing the disablement will be required. All new engines will be certified to comply with EPA emission standards in place at the time of certification.

Useful life of retrofits and engines. Previous projects undertaken by the Iowa Department of Natural Resources Air Quality Bureau have shown that technologies such as diesel oxidation catalysts (DOC) and diesel particulate filters (DPFs) have a useful life of five to ten years. The Iowa DOT will evaluate submitted plans to determine the useful life of engine configuration or verified technologies. All attempts to maximize the life of the vehicles/equipment will be made.

Conserve diesel fuel. Most retrofit technologies, such as DOCs and DPFs, require the use of ultra-low sulfur diesel fuel. Although some technologies (DOCs) can operate with levels of 500 ppm, the majority of retrofits are most effective when the sulfur content is 15 ppm or less. Vehicle replacement alone can provide benefits in fuel efficiency and may provide additional savings in fuel costs.

EPA'S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS

Linkage to EPA Strategic Plan. By taking a statewide approach with this program, the projects selected by the Iowa DOT will reduce local and regional air pollution. Selected diesel emission reduction strategies and technologies will decrease the amount of PM_{2.5}, oxides of nitrogen (NO_x), carbon dioxide (CO₂), volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) emitted from mobile diesel sources.

Organizations participating in the program are making an effort to implement voluntary emissions reductions to their vehicles and equipment. Taking voluntary measures to decrease diesel emissions shows citizens in Iowa that the organizations are serious about decreasing pollution and protecting high-risk populations.

Outputs. Specific outputs cannot be determined at this time since the plan for what strategies and vehicles are intended to be the focus of emissions reductions will not be known until the Iowa DOT has selected one or more project proposals.

During project execution, the Iowa DOT does plan to collect and report on the following: the number of strategies implemented; types of retrofitted engines/vehicles/equipment; expected tons of diesel exhaust reduction achieved, cost-effectiveness of project (in \$/ton or \$/lb.), and the health benefits achieved. EPA's Diesel Emissions Quantifier (DEQ) will be used to help estimate some of these outputs.

Short-term outcomes. The Iowa DOT will continue to educate citizens and stakeholders about the program and the selected projects. Education will include:
Maintaining an Iowa DOT DERA website to publicize the DERA program, including but not limited to, project requirements and information on performance milestones; and
Publicize on social media outlets, such as the Iowa DOT's Facebook and Twitter accounts; and
Publicize the program on participating organizations' websites.

The educational component may include 1) focus on the effect air pollution has on human respiratory systems; 2) explain the ambient air quality standards and what the significant sources of air pollution are; and 3) focus on actions individuals and businesses can take to clean the air every day.

Medium-term outcomes. The Iowa DOT will communicate the diesel emissions reduction benefits to state legislators and the governor's office. The program and its benefits will also be communicated to the citizens of Iowa.

It is intended that by publicizing the project statewide, it will keep stimulating public attention to voluntarily reduce air pollution overall. Organizations, as well as individuals, will be able to better identify how small, voluntary efforts to reduce air emissions can be part of their business plans and lifestyles.

Long-term outcomes. Through this effort and other efforts already in progress, the Iowa DOT expects to see improved ambient air quality in the state. Continued attainment of EPA health standards will reflect this, although other factors beyond diesel emission reductions will also contribute to this measurement.

Continued attention to voluntary efforts that will reduce air pollution will not only help keep Iowa's air quality in attainment but will also help reduce the health risks of targeted "high-risk" populations.

SUSTAINABILITY OF THE PROGRAM

The Iowa DOT will identify the project partners selected for the 2017-2018 DERA Program on their website within sixty days of a signed agreement. Announcements on the Iowa DOT website, as well as social media will serve as the required public notification; information will include the amount of funding and a description of the vehicles and technologies being funded. The Iowa DOT will also include diesel exhaust reduction efforts in communications with the governor's office and state legislators.

Project partners will be asked to publicize the project and the need to reduce diesel emissions on their websites (and in other publications if they choose) to help increase the awareness among their citizens. Opportunities such as conferences, publications, and meetings provide an additional outreach mechanism for the Iowa DOT to communicate with their stakeholders and citizens.

BUDGET NARRATIVE

Itemized Project Budget

Budget Category	FY 2017			FY 2018			Total
	EPA Allocation	Voluntary Match (if applicable)	Mandatory Cost-Share (if applicable)	EPA Allocation	Voluntary Match (if applicable)	Mandatory Cost-Share (if applicable)	
1. Personnel	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2. Fringe Benefits	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3. Travel	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4. Supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5. Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6. Contractual	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7. Program Income	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
8. Other	\$350,256	\$300,000	\$0.00	\$412,685	\$300,000	\$0.00	\$1,362,941
9. Total Direct Charges	\$350,256	\$300,000	\$0.00	\$412,685	\$300,000	\$0.00	\$1,362,941
10. Indirect Charges	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$350,256	\$300,000	\$0.00	\$412,685	\$300,000	\$0.00	1,362,941

Explanation of Budget Framework

- **Personnel** – None
- **Fringe Benefits** – None
- **Travel** - None
- **Equipment** – None
- **Supplies** – None
- **Contractual** – None
- **Program Income** - None. Any project partners that obtain program income will be required to reduce if from the request for reimbursement.
- **Other** – Funding will be provided to project partners to be used only for the purchase and installation of diesel emissions reduction strategy technologies (i.e. retrofit equipment, vehicle replacement, etc.). All partners will be required to enter into an agreement with the Iowa DOT.
- **Indirect Charges** - None

Administrative Costs Expense Cap

Iowa has elected to not use any of the DERA monies to cover administrative costs as identified in OMB Circular A-87 Appendix B (e.g. personnel, benefits, travel, supplies).

Matching Funds and Cost-Share Funds

Matching funds are not required; however, Iowa has elected to use the Volkswagen Environmental Mitigation Trust Fund monies to match EPA's allocation. For all selected projects that require a cost-share (i.e. vehicle replacement), the project partner awarded funding will be responsible for meeting the minimum cost-share. Requirements for the cost-share will be identified in the agreement between the project partner and the Iowa DOT.

Funding Partnerships

The Iowa DOT intends to provide participant support costs to program beneficiaries with eligible projects. Iowa DOT will grant one-time, lump-sum payments to fleet owners for the purchase and installation of eligible emission control technologies and vehicle replacements.

Eligible program beneficiaries will only receive reimbursement for up to the allowable cost-share of eligible equipment and installation costs. A written agreement between the Iowa DOT and the program beneficiary will include the following:

- A description of the activities that will be eligible for reimbursement;
- Identification of which party will have the title to the equipment purchased (if any);
- A listing of the maximum amount to be paid from the grant; and
- a description of the source documentation requirements to ensure proper accounting of EPA funds.