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:	2023-2024 Diesel Emission Reduction Act (DERA) Option
Beneficiary's Project ID:	EMA 10
Funding Request No.	*(sequential)* 20
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 Action Type	■ Appendix D-2 item (specify): Item 10 ■ 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 Volkswagen Trust Funds as voluntary state match.
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):	Overall detail can be found in attachments D, E, and the attached DERA Work Plan. Estimated lifetime benefits are 61.22 short tons for NOx, 4.347 short tons for PM2.5, 5.349 short tons for HC, 12.68 short tons for CO, and 2911.37 short tons for CO2.
Estimate of Anticipated NOx Reductions (5.2.3):	According to EPA's Diesel Emissions Quantifier, the estimated anticipated NOx reductions from these projects are 52.77 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 Bureau
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 www.iowadot.gov/vwsettlement
Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8).	This is outlined in Attachment E, the DERA Work Plan, and the 2023 DERA Information Guide.
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 NOx 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 NOx 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: Dec 12, 2025

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 - 2023	COMPLETION DATE - 2024
Draft DERA Work Plan Due	June 2, 2023	June 2, 2024
Final Approved DERA Work Plan and Budget Submittal	June 17, 2023	June 17, 2024
Provide Notice of Availability of DERA funds	July 13, 2023	July 13, 2024
Project Period for FY 2023-24 DERA Begins	October 1, 2023	October 1, 2024
Quarterly Report Due	October 15, 2023	October 15, 2024
Participant Submits Application	September 9, 2023	September 9, 2024
Application Evaluation, Scoring and Ranking	September 27, 2023	September 26, 2024
Provide Written Approval of Participant Proposal	October 27, 2023	October 27, 2024
Quarterly Report Due	January 15, 2024	January 15, 2025
Prepare Agreements for Participants	October 28, 2023	October 28, 2024
Participant Enters into Contracts, Purchase Orders, etc.	November 4, 2023	November 4, 2024
Public Notification of Awarded Projects	October 27, 2023	October 27, 2024
Project Installation - Start	November 4, 2023	November 4, 2024
Quarterly Report Due	April 15, 2024	April 15, 2025
Quarterly Report Due	July 15, 2024	July 15, 2025
Monitoring and Oversight of Project Implementation	August 31, 2026	August 31, 2026
Project Installation - Complete	August 31, 2026	August 31, 2026
Participants provide detailed invoices for all claimed project costs, documentaion for emission reduction estimates, required certification documents to support reimbursement	August 31, 2026	August 31, 2026
Final Report Due/EPA Closeout	December 31, 2026	December 31, 2026

ATTACHMENT B - 2023

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

BUDGET

Project Description	Project Participant	Project Subtotal	Amount Funded by Trust	Amount Funded by EPA	Amount Funded by Project Participant
Engine Upgrade - Tamper Machine	Crandic Rail	$372,387.00	$99,303.20	$148,954.80	$124,129.00
Vehicle Replacement-Transit Bus	Windstar Lines	$535,000.00	$53,500.00	$80,250.00	$401,250.00
Vehicle Replacement-Bus	Clear Lake CSD	$139,332.00	$13,933.20	$20,899.80	$104,499.00
Vehicle Replacement-Dump Truck	Keokuk County Highway Department	$595,640.00	$76,440.00	$114,660.00	$404,540.00
Vehicle Replacement-Dump Truck	Mahaska County	$312,750.00	$43,784.80	$65,677.20	$203,288.00
Vehicle Replacement-Forklift	Iowa Steel & Wire	$156,415.00	$28,154.70	$42,232.05	$86,028.25
Vehicle Replacement-Bus	West Fork CSD	$139,332.00	$13,933.20	$20,899.80	$104,499.00
Vehicle Replacement-Terminal Truck	Lime Rock Springs	$140,289.50	$13,500.00	$20,250.00	$106,539.50
Totals		**$2,391,145.50**	**$342,549.10**	**$513,823.65**	**$1,534,772.75**
Percentage		100.0%	14.3%	21.5%	64.2%

Individual project amounts subject to change based on actual costs, but not to exceed Totals.

ATTACHMENT B - 2024

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

BUDGET

Project Description	Project Participant	Project Subtotal	Amount Funded by Trust	Amount Funded by EPA	Amount Funded by Project Participant
Repower - Tugboat	Newt Marine	$787,564.00	$126,010.00	$189,015.00	$472,539.00
Vehicle Replacement-Tugboat	Newt Marine	$377,200.00	$37,720.00	$56,580.00	$282,900.00
Vehicle Replacement-Dump Truck	Washington County	$343,846.00	$48,138.40	$72,207.60	$223,500.00
Vehicle Replacement-Transit Bus	JJSP LLC	$594,250.00	$59,424.80	$89,137.20	$445,688.00
Vehicle Replacement-Excavator	Keokuk County	$370,000.00	$51,800.00	$77,700.00	$240,500.00
Vehicle Replacement-Dump Truck	Butler County	$250,000.00	$35,000.00	$52,500.00	$162,500.00
Vehicle Replacement-Dump Truck	Lee County	$250,000.00	$35,000.00	$52,500.00	$162,500.00
Vehicle Replacement-Bus	Clear Lake CSD	$150,000.00	$2,966.80	$4,450.20	$142,583.00
Totals		**$3,122,860.00**	**$396,060.00**	**$594,090.00**	**$2,132,710.00**
Percentage		100.0%	12.7%	19.0%	68.3%

Individual project amounts subject to change based on actual costs, but not to exceed Totals.

ATTACHMENT B

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

PROJECTED TRUST ALLOCATIONS

	2017	2018	2019	2020	2021	2022
1. Anticipated Annual Project Funding Request to be paid through the Trust	$300,000.00	$300,000.00	$3,150,000.00	$1,478,072.00	$4,568,386.68	$7,031,129.32
2. Anticipated Annual Cost Share	$1,205,319.39	$1,297,289.66	$11,006,348.30	$4,280,071.00	$12,409,238.00	$18,371,533.00
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	$1,505,319.39	$1,597,289.66	$14,156,348.30	$5,758,143.00	$16,977,624.68	$25,402,662.32
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	$0.00	$300,000.00	$600,000.00	$3,750,000.00	$5,228,072.00	$9,796,458.68
5. Current Beneficiary Project Funding to be paid through the Trust (line 1)	$300,000.00	$300,000.00	$3,150,000.00	$1,478,072.00	$4,568,386.68	$7,031,129.32
6. Total Funding Allocated to for Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	$300,000.00	$600,000.00	$3,750,000.00	$5,228,072.00	$9,796,458.68	$16,827,588.00
7. Beneficiary Share of Estimated Funds Remaining in Trust	$21,201,737.70	$20,901,737.70	$20,601,737.70	$17,451,737.70	$15,973,665.70	$11,405,279.02
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 7 minus line 5)	$20,901,737.70	$20,601,737.70	$17,451,737.70	$15,973,665.70	$11,405,279.02	$4,374,149.70

	2025					
1. Anticipated Annual Project Funding Request to be paid through the Trust	$738,609.10					
2. Anticipated Annual Cost Share	$4,775,396.40					
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	$5,514,005.50					
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved	$16,827,588.00					
5. Current Beneficiary Project Funding to be paid through the Trust (line 1)	$738,609.10					
6. Total Funding Allocated to for Beneficiary, inclusive of Current Action by Year (line	$17,566,197.10					
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 5)	$20,463,128.60					

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 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, as required by the DERA FY 19-20 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. Engine upgrade of two 1975 diesel engines with two diesel engines (page 14-17) *;
2. Replacement of one 2000 diesel transit bus with one diesel transit bus (page 18) *;
3. Replacement of one 2004 diesel school bus with one diesel school bus (page 19) *;
4. Replacement of one 1999 and one 2000 diesel dump trucks with two Low NOx dump trucks (page 20-21) *;
5. Replacement of one 1993 diesel dump truck with one Low NOx dump truck (page 22) **;
6. Replacement of one 2004 diesel forklift with one all-electric forklift (page 23) *;
7. Replacement of one 2007 diesel school bus with one diesel school bus (page 24) *;
8. Replacement of one 2000 diesel terminal truck with one diesel terminal truck (page 25) *;
9. Repower of two 1982 diesel auxiliary engines with two diesel auxiliary engines (page 26) **;
10. Replacement of one 1982 diesel tugboat with one diesel tugboat (page 27) **;
11. Replacement of one 2005 diesel dump truck with one Low NOx dump truck (page 28) **;
12. Replacement of one 2004 diesel transit bus with one diesel transit bus (page 29) *;
13. Replacement of one 2005 diesel excavator with one Low NOx excavator (page 30) **;
14. Replacement of one 1999 and one 2002 diesel dump trucks with two Low Nox dump trucks (page 31) **;
15. Replacement of one 2009 diesel dump truck with one Low NOx dump truck (page 32) **;
16. Replacement of one 2008 diesel school bus with one gas school bus (page 33) **;

*Purchase Order
** Cost Estimates

Clark Industrial Power LLC

Gilman IL 60938-0127
103 E Butterfield Trail

Invoice

DATE	INVOICE #
5/1/2024	7900

BILL TO
CRANDIC Railway Co. AER Transportation 1445 Rockford Road SW Cedar Rapids, IA 52404

Consignee
CRANDIC Railway Co. Crandic Shops 1445 Rockford Road SW Cedar Rapids, IA 52404

P.O. NUMBER	TERMS	REP	VIA	F.O.B.
GENCO0000271066	Net 30	MLC	truck	Gilman, IL

QTY.	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
1	ROCNK0645T...	12 645 E Tier 0+ Emissions Kit PO GENCO0000271066	92,775.00	92,775.00

P.O. 0000271066
Rec. 446720
cm
05/06/24

201

A finance charge of 1.5% per month (18% per annum) will be added to all past due accounts. A $35 handling fee will be charged on all returned checks.

Total $92,775.00

Clark Industrial Power LLC

Gilman IL 60938-0127
103 E Butterfield Trail

Invoice

DATE	INVOICE #
10/1/2024	8149

BILL TO
CRANDIC Railway Co. AER Transportation 1445 Rockford Road SW Cedar Rapids, IA 52404

Consignee
CRANDIC Railway Co. Crandic Shops 1445 Rockford Road SW Cedar Rapids, IA 52404

P.O. NUMBER	TERMS	REP	VIA	F.O.B.
GENCO0000274788	Net 30		truck	Gilman, IL

QTY.	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
1	ROCNK0645T...	12 645 E Tier 0+ Emissions Kit Power Assemblies:ROCNK0645TOP-12E	95,560.00	95,560.00

P.O. 0000274788
Rec. 456156
cm
10/8/24

A finance charge of 1.5% per month (18% per annum) will be added to all past due accounts. A $35 handling fee will be charged on all returned checks.

Total $95,560.00

MID-AMERICA CAR INC. - LOCOMOTIVE
1523 North Monroe • P.O.Box 33543
Kansas City, MO 64120
816/483-5303 • FAX: 816/483-3360
www.midamericacar.com

I N V O I C E

INVOICE NO.: MAC-20325 DATE: June 6, 2024

Crandic Rail
1445 Rockford Rock SW
Cedar Rapids, IA 52404
Attn: Chris Even

Attached is invoice for tier upgrade to CIC #201, per your specifications.

TOTAL AMOUNT DUE $47,547.38

TERMS NET 30 DAYS

We reserve the right to charge interest on past due invoices at the rate of 1-1/2% per month.

Please remit to:

Mid-America Car, Inc.
P. O. Box 33543
Kansas City, MO 64120

bw

P.O. 0000 273580
Rec. 448820
cm
06/11/24

MID-AMERICA CAR INC. - LOCOMOTIVE
1523 North Monroe • P.O.Box 33543
Kansas City, MO 64120
816/483-5303 • FAX: 816/483-3360
www.midamericacar.com

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I N V O I C E

INVOICE NO.: MAC-20533 DATE: November 22, 2024

Crandic Rail
1445 Rockford Rock SW
Cedar Rapids, IA 52404
Attn: Chris Even

Attached is invoice for tier upgrade to CIC #131, per your specifications.

TOTAL AMOUNT DUE $45,426.84

TERMS NET 30 DAYS

We reserve the right to charge interest on past due invoices at the rate of 1-1/2% per month.

Please remit to:

Mid-America Car, Inc.
P. O. Box 33543
Kansas City, MO 64120

bw

MID-AMERICA CAR, INC.
M1003
CERTIFIED
KANSAS CITY, MO

ABC Bus, Inc.
1506 30th Street NW
Faribault, MN 55021

March 26, 2024

INVOICE

Buyer: MICAT Leasing II, LLC
dba Windstar Lines Inc
1903 Hwy 71 N, Po Box 786
Carroll, IA 51401

YEAR	MAKE	MODEL	SERIAL NUMBER	PRICE
2024	VAN HOOL	CX45	YE2XC86B9R3084267	$ 535,000.00

Deposit - Ck.# 2044 (1/31/2023) $ (2,500.00)

Total Amount Due Prior To Delivery: $ 532,500.00

Wire Transfer Instructions:

DIRECT TO: **Wells Fargo Bank NA**
420 Montgomery
San Francisco, CA 94104

ROUTING NO. **121000248**

ACCOUNT NO. **4270025353**

BENEFICIARY (BNF): **Acct. Legal Name: ABC Bus, Inc.**
a Subsidiary of ABC Companies Inc.

ORIGINATOR INFORMATION **Your Company Name**

INVOICE

School Bus Sales Co.
4537 Texas Street
Waterloo, IA 50702
(319) 296-1363
https://www.sbsales.com

Invoice: 01S1499
Invoice Date: 11/01/2024
Deal/Packet: 2553/1
Branch: School Bus
Department: New

Bill-To:
CLEAR LAKE COMMUNITY SCHOOL DISTRICT
1529 3RD AVE NORTH
CLEAR LAKE, IA 50428

Ship-To:
CLEAR LAKE COMMUNITY SCHOOL DISTRICT
220 NORTH 20TH ST.
ATTN:KEVIN @ BUS GARAGE
CLEAR LAKE, IA 50428

ID: C1100 Ph: (641) 357-2181 P/O: Salesperson: Wade Campbell

+ SOLD UNIT(S)

Stock Number: 12183
VIN: 1BAKJCJA0SF812644
Year: 2025 Make: BB
Body #: F550512

Price: $139,332.00
Model: BBCV3507
Engine Manufacturer: Ford

Total Sold Unit(s):	**$139,332.00**
Total FET:	$0.00
Total:	**$139,332.00**
Net:	$139,332.00

Balance Due: $139,332.00

Terms Due: 11/01/2024

Remit Balance Due To:
School Bus Sales Co.
4537 Texas Street
Waterloo, IA 50702

Comments:
Payment due on delivery.

#70

NEXTRAN TRUCK CENTERS

INVOICE

Nextran Truck Centers - Mediapolis
732 Wapello St Mediapolis IA
52637 (319) 394-9143

Tax Exempt # -
Salesperson: Kyler Waddle
Invoice # 26429
PO Number: -

CUSTOMER INFORMATION (Ship To)

Name: KEOKUK COUNTY ROADS DEPARTMENT
Address: 1301 E Jackson St
City: Sigourney State: IA Zip Code: 52591

Date: 09/05/2025
Phone: 641-622-2610
County: Keokuk

SOLD TO (IF LEASE)

Name: -
Address: -
City: - State: - Zip Code: -

Phone: -
County: -

TRUCK INFORMATION

Quantity	Year	Make	Model	VIN #
1	2026	Mack	GRANITE 84FR	1M2GR4NC9TM007407

2nd VIN - 3rd VIN -

See Addendum for Additional VIN #

Body Details

Year	Make	Model	SERIAL #
2026	Henderson	HPI Mark-E	-
-	-	-	-
-	-	-	-

2nd Serial # - 3rd Serial # -

TRADE INFORMATION

Year	Make	Model	Body	VIN #	Trade-In Value	Payoff
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -

See Addendum for Additional Trade Ins

PRICE ALL UNITS

	All Units
Total Selling Price	$ 293,956.00
Federal Excise Tax	$ -
Total with FET	$ 293,956.00
Extended Warranty	$ 3,218.00
APU	$ -
Premium Maintenance Plan	$ -
Subtotal	$ 297,174.00
Less Trade-In Value	$ -
Net Trade Difference	$ 297,174.00
Disposal/Temp Tags	$ -
Plate Fee	$ -
Tag and Title	$ -
Miscellaneous	$ -
State Sales Tax on Fees	$ -
County Surtax	$ -
State Sales Tax	$ -
Out of State Sales Tax	$ -
Misc. Tax	$ -
Payoff on Trade-In(s)	$ -
Down Payment	$ -
Total Price ALL Trucks	**$ 297,174.00**

ADDITIONAL ITEMS

Tire Credit: $ - FET Tax: Tax Exempt
GVW/GCW: 90,000 Sales Tax: Tax Exempt

FINANCING/LIENHOLDER INFORMATION

Name: -
Address: -
Contact: -
Phone: - Code: -

LOCALS AND COMMENTS

-
-
-
-
-
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OK DH
#610

Purchaser will not register or primarily use the Vehicle(s) in California or Oregon.

I have read and understand the above. It is intended by my signature hereon that this be a binding, enforceable sales agreement. I further understand that the terms and conditions that follow are a true and integral part of this agreement.

David Hamm
Purchaser's Signature

9-11-25
Date

Accepted by Nextran Truck Centers

Date

NEXTRAN TRUCK CENTERS

INVOICE

Nextran Truck Centers - Mediapolis
732 Wapello St Mediapolis IA
52637 (319) 394-9143

Tax Exempt # -
Salesperson: Kyler Waddle
Invoice #
PO Number: -

CUSTOMER INFORMATION (Ship To)

Name: KEOKUK COUNTY ROADS DEPARTMENT
Address: 1301 E Jackson St
City: Sigourney State: IA Zip Code: 52591

Date: 09/23/2025
Phone: 641-622-2610
County: Keokuk

SOLD TO (IF LEASE)

Name: -
Address: -
City: - State: - Zip Code: -

Phone: -
County: -

TRUCK INFORMATION

Quantity	Year	Make	Model	VIN #
1	2026	Mack	GRANITE 84FR	1M2GR4NC0TM007408

2nd VIN - 3rd VIN -

See Addendum for Additional VIN #

Body Details

Year	Make	Model	SERIAL #
2026	Henderson	HPI Mark-E	-
-	-	-	-
-	-	-	-

2nd Serial # - 3rd Serial # -

TRADE INFORMATION

Year	Make	Model	Body	VIN #	Trade-In Value	Payoff
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -
-	-	-	-	-	$ -	$ -

See Addendum for Additional Trade Ins

PRICE ALL UNITS

	All Units
Total Selling Price	$ 295,248.00
Federal Excise Tax	$ -
Total with FET	$ 295,248.00
Extended Warranty	$ 3,218.00
APU	$ -
Premium Maintenance Plan	$ -
Subtotal	$ 298,466.00
Less Trade-In Value	$ -
Net Trade Difference	$ 298,466.00
Disposal/Temp Tags	$ -
Plate Fee	$ -
Tag and Title	$ -
Miscellaneous	$ -
State Sales Tax on Fees	$ -
County Surtax	$ -
State Sales Tax	$ -
Out of State Sales Tax	$ -
Misc. Tax	$ -
Payoff on Trade-In(s)	$ -
Down Payment	$ -
Total Price ALL Trucks	**$ 298,466.00**

ADDITIONAL ITEMS

Tire Credit: $ - FET Tax: Tax Exempt
GVW/GCW: 90,000 Sales Tax: Tax Exempt

FINANCING/LIENHOLDER INFORMATION

Name: -
Address: -
Contact: -
Phone: - Code: -

LOCALS AND COMMENTS

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Purchaser will not register or primarily use the Vehicle(s) in California or Oregon.

I have read and understand the above. It is intended by my signature hereon that this be a binding, enforceable sales agreement. I further understand that the terms and conditions that follow are a true and integral part of this agreement.

David Hamm
Purchaser's Signature

10-6-25
Date

Accepted by Nextran Truck Centers

Date

EXHIBIT A
Scope of Work and Budget

	Name:	Mahaska County Secondard Roads Department					
	Project Category:	Vehicle and Equipment Replacements - Highway Diesel Vehicles and Buses					
	Required Match %:	65%					
Item #	**Description**	**Method of Procurement**	**Units**	**Estimated Unit Cost**	**Total Estimated Cost**	**Estimated Mandatory Cost Share**	**Estimated DERA Share**
1	*Dump Truck and Equipment Replacement*	*Purchase from Vendor (no installation)*	*1*	*$312,750.00*	*$312,750.00*	*$203,287.50*	*$109,462.00*
				Total Project Cost Estimate	**$312,750.00**	**$203,287.50**	**$109,462.00**

HODGE

MATERIAL HANDLING DIVISION
3890 State Street Bettendorf, IA 52722

(563) 359-0315 www.HODGECOMPANY.com

SOLD TO
IO150 IOWA STEEL & WIRE
1500 W VANBUREN ST
CENTERVILLE, IA 52544

SHIP TO
IOWA STEEL & WIRE
1500 W VANBUREN ST
CENTERVILLE, IA 52544

EQUIP INVOICE

Sold By: PURCEL PO #: BILL ZINTZ Date 2/20/25 EQUIP INVOICE EB00572
Ship By: Tax #: MANUFACTURING 13:55:36 Open

Tax	D	Qty	Description	Price	Amount
			Group: 01 EQUIP SALE		
00000*			Z01104 LINDE X35 FORKLIFT SER#:H21252N03224		156415.00

PURCHASE OF LINDE 1252 SERIES, 7K, SERIAL H21252N03224
TRIPLE MAST 1533, A/C AND HEAT, 48 INCH FORKS

INVOICE DUE UPON RECEIPT

THANK YOU

Invoice due and payable in full upon receipt. Accounts past due may be subject to a FINANCE CHARGE of 1 1/2% per month which is an (18% ANNUAL PERCENTAGE RATE) or a minimum finance charge of $1.00.

** SUBTOTAL 156415.00

X_____ Charge Sale

Phone: (800)325-5118

PAY THIS AMOUNT $156415.00

Visit us on the web at
WWW.HODGECOMPANY.COM

REMIT TO:
400 Ice Harbor Drive
Dubuque, IA 52001

INVOICE

School Bus Sales Co.
4537 Texas Street,
Waterloo, IA 50702
(319) 296-1363
https://www.sbsales.com

Invoice:	0181498
Invoice Date:	11/01/2024
Deal/Packet:	2652/1
Branch:	School Bus
Department:	New

Bill-To:	Ship-To:
WEST FORK CSD PO BOX 60 ROCKWELL, IA 50469	WEST FORK CSD 403 1st ST ROCKWELL, IA 50469

ID: R0450 Ph: (641)822-3235 P.O.: Salesperson: Wade Campbell

+ SOLD UNIT(S)

Stock Number: 12182 — Price: $139,332.00
VIN: 1BAKJCJA9SF812843
Year: 2025 Make: SB Model: BBCV3507
Body #: F550511 Engine Manufacturer: Ford

Total Sold Unit(s):	$139,332.00
Total FET:	$0.00
Total:	$139,332.00
Net:	$139,332.00
Balance Due:	**$139,332.00**

Terms Due: 11/01/2024

Remit Balance Due To:
School Bus Sales Co.
4537 Texas Street
Waterloo, IA 50702

Comments:
Payment due on delivery.

INVOICE/BILL OF SALE

TRUCK COUNTRY

Truck Country of Iowa, Inc
3201 Hwy 61/151
Dubuque, IA 52003
563-556-3773 | truckcountry.com

Contract #: VM101006578
Contract Date: 11-08-2024
Deal #: DE-35495
Customer #: 29086
Salesperson: Trey

Bill To: 29086
LIME ROCK SPRINGS CO.
10537 Route 3
DUBUQUE, IA 52001-8857
Phone: (563)556-2921

Ship To:
LIME ROCK SPRINGS CO.
10537 Route 3
DUBUQUE, IA 52001
Phone: (563)556-2921

Stock Number:	Condition/Year/Make/Model:	Vin Number:	FET:	Price:	Unit Price:
900744	New-2025 Western Star 47X	3BHBBPFE6SDWA4691	$14,871.02	$125,255.98	$140,127.00
				Total Unit Price:	**$140,127.00**
				Subtotal:	$140,127.00
				DOC Fee:	$162.50
				Total Purchase Price:	**$140,289.50**

Due on Delivery:
NET BALANCE DUE ON DELIVERY: **$140,289.50**

Lienholder:

Comments:

X [signature] 11-08-2024
Purchasers Signature: Date:

Purchasers Signature: Date:

SS/FED ID#:

Trey Daugherty 11-08-2024
Sales Representative: Date:

[signature] 11-8-24
Sales Representative Signature: Date:

EXHIBIT A
Scope of Work and Budget

DERA Estimated Budget and Individual Cost Items

INSTRUCTIONS: Eligible expenses are costs directly incurred through the purchase of eligible technologies, equipment, vehicles, and installation activities. Only eligible costs will be reimbursed. Please provide an itemized breakdown of the total project cost estimate. The number of items needed to achieve the project's objective may vary widely depending on the type, scope, and complexity of the project. The list you provide here should communicate **EACH COST ITEM** that you would expect to be reimbursed for and should provide Iowa DOT with a complete list of all expected indivual invoices or documentation for all expected items of cost. Some examples have been provided. Each item should indicate the number of items to be purchased or installed, a per unit estimated cost, and extended item cost.

Name: Sunflower Enterprises, Inc.
Project Category: Certified Engine Replacement - Locomotive, Marine and Nonroad Diesel Vehi
Required Match %: 60%

Item #	Description	Method of Procurement	Units	Estimated Unit Cost	Total Estimated Cost	Estimated Mandatory Cost Share	Estimated DERA Share
1	*Interstate Power-Volvo Penta D13MH Engine & Gearbox(both*	*Purchase from Vendor (no installation)*	*1*	*$261,564.00*	*$261,564.00*	*$156,938.40*	*$104,625.60*
2	*Misc Parts*	*Purchase from Vendor (no installation)*	*1*	*$171,000.00*	*$171,000.00*	*$102,600.00*	*$68,400.00*
3	*Drydock and Installation Labor*	*Installation Only (In-house)*	*1*	*$355,000.00*	*$355,000.00*	*$213,000.00*	*$142,000.00*
				Total Project Cost Estimate	**$787,564.00**	**$472,538.40**	**$315,025.00**

EXHIBIT A
Scope of Work and Budget

INSTRUCTIONS: Eligible expenses are costs directly incurred through the purchase of eligible technologies, equipment, vehicles, and installation activities. Only eligible costs will be reimbursed. Please provide an itemized breakdown of the total project cost estimate. The number of items needed to achieve the project's objective may vary widely depending on the type, scope, and complexity of the project. The list you provide here should communicate **EACH COST ITEM** that you would expect to be reimbursed for and should provide Iowa DOT with a complete list of all expected indivual invoices or documentation for all expected items of cost. Some examples have been provided. Each item should indicate the number of items to be purchased or installed, a per unit estimated cost, and extended item cost.

Name: Sunflower Enterprises, Inc.
Project Category: Vehicle and Equipment Replacements - Locomotives and Nonroad Diesel Veh
Required Match %: 75%

Item #	Description	Method of Procurement	Units	Estimated Unit Cost	Total Estimated Cost	Estimated Mandatory Cost Share	Estimated DERA Share
1	*New 600 HP Tugboat*	*Purchase from Vendor (no installation)*	*1*	*$361,700.00*	*$361,700.00*	*$271,275.00*	*$90,425.00*
2	*Delivery*	*Purchase from Vendor (no installation)*	*1*	*$14,000.00*	*$14,000.00*	*$10,500.00*	*$3,500.00*
3	*Sea Trial*	*Installation Only (In-house)*	*1*	*$1,500.00*	*$1,500.00*	*$1,125.00*	*$375.00*
				Total Project Cost Estimate	**$377,200.00**	**$282,900.00**	**$94,300.00**

EXHIBIT A
Scope of Work and Budget

DERA Estimated Budget and Individual Cost Items

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Name: Washington County Secondary Roads

Project Category: Vehicle and Equipment Replacements - Highway Diesel Vehicles and Buses

Required Match %: 65%

Item #	Description	Method of Procurem	Units	Estimated Unit Cost	Total Estimated Cost	Estimated Mandatory Cost Share	Estimated DERA Share
1	*Truck Chassis and Dump*	*Purchase from Vendor (includes*	*1*	*$343,846.00*	*$343,846.00*	*$223,499.90*	*$120,346.10*
					$0.00	*$0.00*	*$0.00*
					$0.00	*$0.00*	*$0.00*
				Total Project Cost Estimate	**$343,846.00**	**$223,499.90**	**$120,346.00**

Invoice #
506066

July 9, 2025

INVOICE

Sold To:	Ship to:
Banc of America Leasing & Capital, LLC 600 Peachtree St. NE, 11th Floor Atlanta, GA 30308	JJSP Leasing LLC 1903 Hwy 71 N, Po Box 786 Carroll IA 51401

Terms Due: Upon Request

YEAR/MAKE/MODEL/SERIAL NO			
2025 VAN HOOL CX45	Serial No. U1VXC86B9S3084645	$	594,250.00
Amount Due To ABC Bus, Inc.		**$**	**594,250.00**

Please Pay: ABC BUS, INC.

Wire Transfer Instructions:

DIRECT TO:	**Wells Fargo Bank NA 420 Montgomery San Francisco, CA 94104**
ROUTING NO.	**121000248**
ACCOUNT NO.	**4270025353**
BENEFICIARY (BNF):	**Acct. Legal Name: ABC Bus, Inc. a Subsidiary of ABC Companies Inc.**
ORIGINATOR INFORMATION	**Your Company Name**

EXHIBIT A
Scope of Work and Budget

DERA Estimated Budget and Individual Cost Items

INSTRUCTIONS: Eligible expenses are costs directly incurred through the purchase of eligible technologies, equipment, vehicles, and installation activities. Only eligible costs will be reimbursed. Please provide an itemized breakdown of the total project cost estimate. The number of items needed to achieve the project's objective may vary widely depending on the type, scope, and complexity of the project. The list you provide here should communicate **EACH COST ITEM** that you would expect to be reimbursed for and should provide Iowa DOT with a complete list of all expected indivual invoices or documentation for all expected items of cost. Some examples have been provided. Each item should indicate the number of items to be purchased or installed, a per unit estimated cost, and extended item cost.

Name: Keokuk County Highway Department
Project Category: Vehicle and Equipment Replacements - Highway Diesel Vehicles and Buses
Required Match %: 65%

Item #	Description	Method of Procurement	Units	Estimated Unit Cost	Total Estimated Cost	Estimated Mandatory Cost Share	Estimated DERA Share
1	*Vehicle Replacement*	*Purchase from Vendor (no installation)*	*1*	*$370,000.00*	*$370,000.00*	*$240,500.00*	*$129,500.00*
						$0.00	
				Total Project Cost Estimate	**$370,000.00**	**$240,500.00**	**$129,500.00**

EXHIBIT A
Scope of Work and Budget

DERA Estimated Budget and Individual Cost Items

INSTRUCTIONS: Eligible expenses are costs directly incurred through the purchase of eligible technologies, equipment, vehicles, and installation activities. Only eligible costs will be reimbursed. Please provide an itemized breakdown of the total project cost estimate. The number of items needed to achieve the project's objective may vary widely depending on the type, scope, and complexity of the project. The list you provide here should communicate **EACH COST ITEM** that you would expect to be reimbursed for and should provide Iowa DOT with a complete list of all expected indivual invoices or documentation for all expected items of cost. Some examples have been provided. Each item should indicate the number of items to be purchased or installed, a per unit estimated cost, and extended item cost.

Name: Butler County

Project Category: Vehicle and Equipment Replacements - Highway Diesel Vehicles and Buses

Required Match %: 65%

Item #	Description	Method of Procurement	Units	Estimated Unit Cost	Total Estimated Cost	Estimated Mandatory Cost Share	Estimated DERA Share
1	*Western Star 47X Chassis - GHG 2024 Configuration*	*Purchase from Vendor (no installation)*	*2*	*$125,000.00*	*$250,000.00*	*$162,500.00*	*$87,500.00*
Total Project Cost Estimate					**$250,000.00**	**$162,500.00**	**$87,500.00**

EXHIBIT A
Scope of Work and Budget

DERA Estimated Budget and Individual Cost Items

INSTRUCTIONS: Eligible expenses are costs directly incurred through the purchase of eligible technologies, equipment, vehicles, and installation activities. Only eligible costs will be reimbursed. Please provide an itemized breakdown of the total project cost estimate. The number of items needed to achieve the project's objective may vary widely depending on the type, scope, and complexity of the project. The list you provide here should communicate **EACH COST ITEM** that you would expect to be reimbursed for and should provide Iowa DOT with a complete list of all expected indivual invoices or documentation for all expected items of cost. Some examples have been provided. Each item should indicate the number of items to be purchased or installed, a per unit estimated cost, and extended item cost.

Name: Lee County Secondary Roads
Project Category: Vehicle and Equipment Replacements - Highway Diesel Vehicles and Buses
Required Match %: 65%

Item #	Description	Method of Procurement	Units	Estimated Unit Cost	Total Estimated Cost	Estimated Mandatory Cost Share	Estimated DERA Share
1	*Tandum Axle Chassis with Dump Body*	*Purchase from Vendor (no installation)*	*1*	*$250,000.00*	*$250,000.00*	*$162,500.00*	*$87,500.00*
				Total Project Cost Estimate	**$250,000.00**	**$162,500.00**	**$87,500.00**

EXHIBIT A
Scope of Work and Budget

DERA Estimated Budget and Individual Cost Items

INSTRUCTIONS: Eligible expenses are costs directly incurred through the purchase of eligible technologies, equipment, vehicles, and installation activities. Only eligible costs will be reimbursed. Please provide an itemized breakdown of the total project cost estimate. The number of items needed to achieve the project's objective may vary widely depending on the type, scope, and complexity of the project. The list you provide here should communicate **EACH COST ITEM** that you would expect to be reimbursed for and should provide Iowa DOT with a complete list of all expected indivual invoices or documentation for all expected items of cost. Some examples have been provided. Each item should indicate the number of items to be purchased or installed, a per unit estimated cost, and extended item cost.

Name: Clear Lake CSD
Project Category: Vehicle and Equipment Replacements - Highway Diesel Vehicles and Buses
Required Match %: 75%

Item #	Description	Method of Procurement	Units	Estimated Unit Cost	Total Estimated Cost	Estimated Mandatory Cost Share	Estimated DERA Share
1	*New Gasoline Bus*	*Purchase from Vendor (no installation)*	*1*		*$150,000.00*	*$112,500.00*	*$37,500.00*
					$0.00	*$0.00*	*$0.00*
					$0.00	*$0.00*	*$0.00*
				Total Project Cost Estimate	**$150,000.00**	**$112,500.00**	**$7,417.00**

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. Cost share requirements are in the table below.

The following pages consist of the Iowa DOT's Fiscal Year 2023-2024 State Clean Diesel Grant Program Work Plan and Budget Narrative.

DERA Funding Limits and Mandatory Cost-Share Requirements for Eligible Activities

DERA ELIGIBLE ACTIVITIES	DERA FUNDING LIMITS	MINIMUM COST-SHARE (FLEET OWNER CONTRIBUTION)
Drayage Truck Replacement	50%	50%
Vehicle or Equipment Replacement with EPA Certified Engine	25%	75%
Vehicle or Equipment Replacement with CARB Certified Low NOx Engine	35%	65%
Vehicle or Equipment Replacement with Zero-tailpipe Emission Power Source	45%	55%
Engine Replacement with EPA Certified Engine	40%	60%
Engine Replacement with CARB Certified Low NOx Engine	50%	50%
Engine Replacement with Zero-tailpipe Emission Power Source	60%	40%
EPA Certified Remanufacture Systems	100%	0%
EPA Verified Highway Idle Reduction Technologies when combined with new or previously installed exhaust after-treatment retrofit	100%	0%
EPA Verified Highway Idle Reduction Technologies without new exhaust after-treatment retrofit	25%	75%
EPA Verified Locomotive Idle Reduction Technologies	40%	60%
EPA Verified Marine Shore Connection Systems	25%	75%
EPA Verified Electrified Parking Space Technologies	30%	70%
EPA Verified Exhaust After-treatment Retrofits	100%	0%
EPA Verified Engine Upgrade Retrofits	100%	0%
EPA Verified Hybrid Retrofit Systems	60%	40%
EPA Verified Fuel and Additive Retrofits when combined with new retrofit, upgrade, or replacement	Cost differential between conventional diesel fuel	Cost of conventional diesel fuel
EPA Verified Aerodynamics and Low Rolling Resistance Tires when combined with new exhaust after-treatment retrofit	100%	0%
Alternative Fuel Conversion	40%	60%

2023-2024 Diesel Emissions Reduction Act (DERA) State Program

Work Plan and Budget Narrative Template

INSTRUCTIONS: States and territories applying for 2023-2024 DERA State Program funds should use this template to prepare their Work Plan and Budget Narrative.

Please refer to the 2023-2024 DERA State Program Guide full program details, eligibility criteria and funding restrictions, and application instructions.

****

SUMMARY PAGE

Project Title: Diesel Emission Reductions Solutions of Iowa

Project Manager and Contact Information

Organization Name: Iowa Department of Transportation

Project Manager: Jared Smith

Mailing Address: 800 Lincoln Way, Ames, Iowa 50010

Phone: 515-239-1713

Fax: N/A

Email: Jared.smith@iowadot.us

Project Budget Overview:

	2022*	**2023**	**2024**	**Total**
EPA Base Allocation	$353,912	$423,576	$396,060	$
Total State Contribution *(Cost share)*	$353,912	$423,576	$396,060	$
EPA Match Bonus *(If applicable)*	$176,956	$211,788	$198,030	$
Total EPA Allocation *(base plus match bonus if applicable)*	$530,868	$635,364	$594,090	$
TOTAL Project Cost *(EPA Allocation plus State contribution)*	**$884,780**	**$1,058,940**	**$990,150**	$

Note: *If state participated in 2022

3 Year Project Period for 2023-2024 State DERA Grants[1]

FY2023 First Phase: October 1, 2023 – September 30, 2024

FY2024 Incremental Amendments: October 1, 2024 – September 30, 2025

2023-2024 Project Period Close Out: September 30, 2026

Summary Statement

The Iowa Department of Transportation (Iowa DOT) will create and implement a process that will allow profit, non-profit, 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 2023. 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 - current 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 (CO_2), 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.

While federal standards continue to ensure a reduction of emissions from newer diesel engines; older, dirtier diesel engines 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.

[1] FY2024 funds will be dispersed as an incremental amendment to existing 2023 DERA State Grants or, if a state does not have a 2023 grant, a new award.

Iowa's air contains a relatively high concentration of fine particles across the state. For the past few years, monitored areas around Iowa have been on the edge of EPA's health standard for fine particulate matter with a diameter less than or equal to 2.5 microns ($PM_{2.5}$). Add in prevailing winds, centers of industry and concentrated areas of diesel exhaust, some counties are being observed. Currently though, Iowa does not have any designated air quality nonattainment or maintenance areas for transportation-related air pollution that do not meet the National Ambient Air Quality Standards of the 1990 Clean Air Act Amendments. Overall, Iowa's air quality has improved dramatically since 1978, largely due to large facilities across Iowa that have actively worked to reduce emissions by replacing aging equipment with more efficient technology that incorporates the latest emissions controls. While Iowa's trend since 1978 shows substantial benefits in air quality and decreases in air pollutant emissions, Iowa's productivity, populations, and vehicle travel miles increased – all potential sources of pollution. Iowa's gross domestic product is up by 65 percent since 1990, vehicle miles traveled climbed by 38 percent and population increased by 11 percent. To see real-time air quality data, please visit the Iowa Department of Natural Resources Air Quality Bureau webpage on Monitoring Ambient Air.

The primary sectors that make up the diesel fleet in Iowa are aircraft, commercial marine vessels, locomotives, non-road equipment, on-road diesel heavy duty vehicles, and on-road diesel light duty vehicles. According to EPA's 2014 National Emissions Inventory for Iowa, on-road diesel transportation was the second largest source of mobile pollution in general and the largest source of pollution among all mobile sources for carbon monoxide (CO) at 42%, and ammonia (NH_3) at 68%. Non-road diesel equipment is the largest source of mobile pollution in general. A cursory review of the mobile and stationary source emissions inventory data for nitrogen oxides (NO_x) indicates that NO_x emissions from mobile on-road diesel sources are greater than that from stationary sources. Partnering with public and private organizations to reduce mobile diesel engine emissions will be beneficial to reducing these air pollution emissions.

VEHICLES AND TECHNOLOGIES:

Eligible Entities. Funding for diesel emission reduction projects is available to 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 (of Type A, B, C, and D);
- Medium-duty or Heavy-duty Transit Buses;
- Medium-duty or Heavy-duty Trucks (defined as Class 5 through Class 8);
- Marine Engines;
- Locomotives; and
- Non-road engines, equipment, or vehicles used in:
    - Construction;
    - Handling of cargo (including at a port or airport);
    - Agriculture;

- Mining; or
- Energy production (including stationary generators and pumps)

Eligible Diesel Emission Reduction Strategies

1. **Vehicle and Equipment Replacements:** Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can be replaced with newer, cleaner vehicles and equipment. Eligible replacement vehicles and equipment include those powered by diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery or fuel cell).

   To be eligible for funding, vehicles and equipment must be powered by engines certified by EPA and, if applicable, CARB emission standards. Zero tailpipe emissions vehicles and equipment do not require EPA or CARB certification. EPA's annual certification data for vehicles, engines, and equipment may be found at: www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment. EPA's engine emission standards may be found at: www.epa.gov/emission-standards-reference-guide/all- epa-emission-standards. Engines certified by CARB may be found by searching CARB's Executive Orders for Heavy-duty Engines and Vehicles, found at: www.arb.ca.gov/msprog/onroad/cert/cert.php. Please see the Low-NO_x Engine Factsheet found at www.epa.gov/dera/state for guidance on identifying engines certified to meet CARB's Optional Low NO_x Standards.

2. **Engine Replacement:** Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can have their engines replaced with newer, cleaner engines. Eligible replacement engines include those certified for use with diesel or clean alternative fuel (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery or fuel cell).

   To be eligible for funding, replacement engines must be certified to EPA or, if applicable, CARB emission standards. However, zero tailpipe emissions engine replacements do not require EPA or CARB certification. EPA's annual certification data for vehicles, engines, and equipment may be found at: www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment. EPA's engine emission standards may be found at: www.epa.gov/emission-standards-reference-guide/all-epa-emission-standards. Engines certified by CARB may be found by searching CARB's Executive Orders for Heavy-duty Engines and Vehicles, found at: www.arb.ca.gov/msprog/onroad/cert/cert.php.

   Please see the Low-NOx Engine Factsheet found at www.epa.gov/dera/state for guidance on identifying engines certified to meet CARB's Optional Low NOx Standards.

3. **Certified Remanufacture Systems:** Generally, a certified remanufacture system is applied during an engine rebuild and involves the removal of parts on an engine and replacement with parts that cause the engine to represent an engine configuration which is cleaner than

the original engine. Some locomotives and marine engines can be upgraded through the application of a certified remanufacture system (i.e. kit). Engine remanufacture systems may not be available for all engines, and not all remanufacture systems may achieve an emissions benefit. Applications for certified remanufacture systems should include a discussion of the availability of engine remanufacture systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the upgrade will result in a PM and/or NOx emissions benefit. If a certified remanufacture system is applied at the time of rebuild, funds under this award cannot be used for the entire cost of the engine rebuild, but only for the cost of the certified remanufacture system and associated labor costs for installation of the kit.

To be eligible for funding, remanufacture systems for locomotives and marine engines must be certified by EPA at the time of acquisition. List of certified remanufacture systems are available at: www.epa.gov/compliance-and-fuel-economy-data/engine-certification-data, and additional information on remanufacture systems is available at: www.epa.gov/vehicle-and-engine-certification/remanufacture-systems-category-1-and-2-marine-diesel-engines.

4. **Verified Idle Reduction Technologies:** An idle reduction project is generally defined as the installation of a technology or device that reduces unnecessary idling of diesel engines and/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.

   The eligible idle reduction technologies by associated vehicle type are below. To be eligible for funding under (a) through (d) below, these technologies must be on EPA's SmartWay Verified Technologies list (www.epa.gov/verified-diesel-tech/smartway-technology) at the time of acquisition.

   a) **Long haul Class 8 trucks equipped with sleeper cabs**:
      - Auxiliary power units and generator sets
      - Battery air conditioning systems
      - Thermal storage systems
      - Fuel operated heaters (direct fired heaters)
      - Electrified parking spaces (truck stop electrification)

   b) **School buses**: Fuel operated heaters (direct fired heaters)

   c) **Transport refrigeration units**: Electrified parking spaces

      Please see the TRU Factsheet at www.epa.gov/dera/state for information on TRUs and eligible TRU projects.

   d) **Locomotives:**
      - Automatic engine shut down/start-up systems
      - Auxiliary power units and generator sets
      - Fuel operated heaters (direct fired heaters)
      - Shore power connection systems

No funds awarded under this grant shall be used for locomotive shore connection system projects that are expected to be used less than 1,000 hours/year.

e) **Marine vessels**: Shore power connection systems

Funding may support new installations, or expansions of existing shore power systems. More information on marine shore power connection systems may be found at www.epa.gov/verified-diesel-tech/learn-about-marine-technology. To be eligible for funding, marine shore power projects must meet the following criteria:

1. Applicants must attest to compliance with international shore power design standards (ISO/IEC/IEEE 80005-1:2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems).
2. Shore power connection systems must be supplied with electricity from the local utility grid.
3. Demonstration that the proposed system has the capacity, demand, and commitment to be used for more than 1,000 megawatt-hours per year. Smaller projects will be considered if the applicant can demonstrate cost effectiveness.
4. Due to the unique nature and custom design of marine shore power connection systems, EPA will review and approve marine shore power connection systems on a case-by-case basis. If the project application is selected for funding, the final design of the marine shore power connection system will require specific EPA approval prior to purchase and installation.
5. Applicants must commit to reporting usage information to EPA for five years after the system is operational.
6. Shore power capable vessels docked at a berth where shore power is available must be required to turn off the vessel's engines and use the shore power system, with limited exceptions for extreme circumstances.
7. Applicants proposing marine shore power connection systems will need to include the following information:
    a) the annual number of ship visits to berth where the shore power system is to be installed;
    b) average hoteling (or idling) time per visit; and
    c) information about the fleet of vessels that has, or will have, the ability to use the shore-side connection system, including:
        - the estimated annual number of ship visits to the shore power enabled berth that will use the shore power system;
        - estimated annual hoteling hours using shore power system;
        - fuel type and average sulfur content of fuel used in the auxiliary engines for each vessel;

- auxiliary engine and boiler information for each vessel;
- estimated annual hoteling load requirements (megawatt-hours);

d) any documented commitment of visits and hours by the fleet of vessels that has, or will have, the ability to use the shore-side connection system; and

e) estimated emissions reductions. Applicants can use the calculator tool found here: www.epa.gov/ports-initative/shore-power-technology-assessment-us-ports

5. Verified Retrofit Technologies: Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include engine exhaust after-treatment technologies, such as diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), closed crankcase filtration systems (CCVs), and selective catalytic reduction systems (SCRs). Manufacturer engine upgrades which achieve specific levels of emission reductions by applying a package of components have been verified as retrofits for some nonroad and marine engines. Several systems which convert a conventional diesel engine configuration to a hybrid-electric system have been verified as retrofits for some nonroad and marine engines. Some cleaner fuels and additives have been verified as retrofits by EPA and/or CARB to achieve emissions reductions when applied to an existing diesel engine. Older, heavy-duty diesel vehicles that will not be retired for several years are good candidates for verified retrofit technologies. EPA suggests that fleets proposing to install verified retrofit technologies consult with suppliers to confirm that the proposed vehicles/engines and their duty-cycles are good candidates for the technology.

To be eligible for funding, verified retrofit technologies must be on EPA's (www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel) or CARB's (https://ww2.arb.ca.gov/verification-procedure-currently-verified) Verified Technologies lists at the time of acquisition, must be used only for the vehicle/engine application specified on the lists, and must meet any applicable verification criteria. EPA will not fund stand-alone cleaner fuel/additive use. To be eligible for funding, verified fuels and additives must be for new or expanded use, and must be used in combination, and on the same vehicle, with a new eligible verified engine retrofit or an eligible engine upgrade or an eligible certified engine, vehicle, or equipment replacement funded under this grant.

6. Clean Alternative Fuel Conversions: Existing highway diesel engines can be altered to operate on alternative fuels such as propane and natural gas by applying an alternative fuel conversion kit.

To be eligible for funding, alternative fuel conversion systems must be certified by EPA and/or CARB or must be approved by EPA for Intermediate-Age engines. EPA's lists of "Certified Conversion Systems for New Vehicles and Engines" and "Conversion Systems for Intermediate-Age Vehicles and Engines" are available at www.epa.gov/vehicle-and-engine- certification/lists-epa-compliant-alternative-fuel-conversion-systems; CARB's list

of "Approved Alternate Fuel Retrofit Systems" are available at: www.arb.ca.gov/msprog/aftermkt/altfuel/altfuel.htm.

To be eligible for funding, conversion systems for engine model years 2006 and earlier must achieve at least a 30% NO_x reduction and a 10% PM reduction from the applicable certified emission standards of the original engine. To be eligible for funding, conversion systems for engine model years 2007 and newer must achieve at least a 20% NO_x reduction with no increase in PM from the applicable certified emission standards of the original engine. Applications for clean alternative fuel conversions should include a discussion of the availability of conversion systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the conversions result in the required emissions benefit.

7. **Verified Aerodynamic Technologies and Verified Low Rolling Resistance Tires**: To improve fuel efficiency, long haul Class 8 trucks can be equipped with aerodynamic trailer fairings and/or low rolling resistance tires.

   To be eligible for funding, technologies must be on EPA's verified aerodynamic technologies list (www.epa.gov/verified-diesel-tech/smartway-verified-list-aerodynamic-devices) and verified list for low rolling resistance new and retread tire technologies list (www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-lrr-new-and-retread-tire) at the time of acquisition, must be used only for the application specified on the lists, and must meet any applicable verification criteria. EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. To be eligible for funding, these technologies must be combined on the same vehicle with the new installation of an exhaust after-treatment retrofit funded under this grant.

Project Eligibility Criteria

- All existing engines and new vehicles, engines, and technologies will meet the eligibility criteria defined in Section VIII.D of the 2021 Diesel Emissions Reduction Act (DERA) State Grants Program Guide.

Eligible and Ineligible Project Costs

- Eligible project costs are those costs directly related to the implementation, management, and oversight of the project, including recipient and subrecipient personnel and benefits, equipment, contractual, travel, supplies, subgrants and rebates, and indirect costs. All project costs will meet the eligibility criteria defined in Section VIII.E of the 2021 Diesel Emissions Reduction Act (DERA) State Grants Program Guide.

Ownership, Usage and Remaining Life Requirements

1. The existing vehicle, engine, or equipment must be fully operational. Operational equipment must be able to start, move, and have all necessary parts to be operational.

2. The participating fleet owner must currently own and operate the existing vehicle or equipment and have owned and operated the vehicle during the two years prior to upgrade.

3. The existing vehicle, engine, or equipment must have at least three years of remaining life at the time of upgrade. Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding. The remaining life estimate is the number of years of operation remaining even if the unit were to be rebuilt or sold to another fleet. The remaining life estimate depends on the current age and condition of the vehicle at the time of upgrade, as well as things like usage, maintenance, andclimate.

4. **Highway Usage**: The mileage of multiple units may be combined to reach the thresholds below where those units will be scrapped and replaced with a single unit.
    a. **School Buses**: To be eligible for funding, the existing vehicle must have accumulated at least 7,000 miles/year during the two years prior to upgrade, or during calendar year (Jan-Dec) 2019.
    b. **All Other Highway Engines**: To be eligible for funding, the existing vehicle must have accumulated at least 7,000 miles/year during the two years prior to upgrade.

5. **Nonroad, Locomotive and Marine Usage:** The engine operating hours of multiple units may be combined to reach the thresholds below where those units will be scrapped and replaced with a single unit.
    a. **Agricultural Pumps**: To be eligible for funding, agricultural pumps must operate at least 250 hours/year during the two years prior to upgrade.
    b. **All Other Nonroad Engines**: To be eligible for funding, nonroad engines must operate at least 500 hours/year during the two years prior to upgrade.
    c. **Locomotive and Marine Usage**: To be eligible for funding the existing locomotive and marine engines must operate at least 1,000 hours/year during the two years prior to upgrade.

6. Documentation Requirements: Participating fleet owners must attest to each criterion in 1-5 above in a signed eligibly statement which includes each vehicle make, model, year, vehicle identification number, odometer/usage meter reading, engine make, model, year, horsepower, engine ID or serial number, and vehicle/equipment registration/licensing number and state. This documentation is not required at the time of application submittal to EPA but is required as part of programmatic reporting to verify the eligible use of grant funds. A sample eligibility statement may be found at www.epa.gov/dera/state.

ROLES AND RESPONSIBILITIES:

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

Program beneficiaries 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 program beneficiary 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 program beneficiary 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 be responsible for selecting eligible entities, developing and managing all written agreements, handling oversight of the entire federal grant award, and submitting 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 an application identifying the strategy that makes the most sense for their diesel engine operations. The submitted application must at a minimum:

- 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 applications selected for reimbursement. Successful applicants will be required to sign a written 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:

- Number of registered Volkswagen vehicles in the county of the project (due to Iowa's state match coming from the DERA Option of the Volkswagen Settlement);
- Mobile source air pollution in areas of concern;
- Diesel Emissions Quantifier emission reduction estimates for NOx, PM2.5, VOC, and CO;

- Impacts of diesel emissions on sensitive populations related to human health (rate of asthma and rate of heart disease), environment (ozone), global climate (CO2) and areas of vulnerable populations;
- Priority county locations as noted in the 2021 Priority County List (air quality concerns); and,
- Cost effectiveness of NOx emission reduction (dollars per amount of NOx emissions reduced).

Funding and Match Requirements. Participating program beneficiaries will be eligible to receive a one-time, lump-sum reimbursement for up to the allowable cost share of eligible equipment and installation costs of their projects. The Iowa DOT will reimburse program beneficiaries, dependent on their project, up to the percentages outlined in the DERA Program Guide.

A participant support 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 written agreement requirements have been met, and that the expenses have been incurred and paid by the participating program beneficiary. A written agreement between the Iowa DOT and the program beneficiary will include the following at a minimum:

- A description of the activities that will be eligible for reimbursement and supported by rebates, subsidies, or other payments;
- Identification of which party will have the title to the equipment (if any) purchased with a rebate or subsidy;
- Specified maximum amount eligible to be paid from the rebate, subsidy, or payment; and
- A description of the source documentation requirements to ensure proper accounting of EPA funds.

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.

TIMELINE AND MILESTONES:

Major Milestones	Completion Dates
Deadline to submit work plan and budget narrative to EPA region	October 8, 2024
Deadline to submit application on Grants.gov	November 8, 2024
Request for grant applications from participating organizations	December 2024
Iowa DOT evaluates applications	December 2024
Project period for FY 2024 begins	December 1, 2024
Prepare agreement(s) between Iowa DOT and participating organization	January 2025
Participating organization project begins	January 2025
Public notification of projects on Iowa DOT's DERA website	60 days from agreement execution
Quarterly reporting due to EPA	Ongoing
Deadline for FY 2023 projects to be completed	September 30, 2026
Final reporting due to EPA	Within 90 days of completion

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 two counties listed in the 2021 Priority County List would also 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 NOx, HC, PM2.5, 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.

ENVIRONMENTAL JUSTICE AND DISADVANTAGED COMMUNITIES:

The project area has no disadvantaged communities, which are defined as meeting one or both nonattainment or maintenance area, or area of air toxics concern. Project area community engagement efforts to ensure public opportunity and contributions are considered on all applications submitted.

PROJECT SUSTAINABILITY:

The Iowa DOT will identify the program beneficiaries selected for the 2024 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.

Program beneficiaries 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 stakeholders. Opportunities such as conferences, publications, and meetings provide an additional outreach mechanism for the Iowa DOT to communicate with their stakeholders and citizens.

PROJECT RESILIENCE TO CLIMATE IMPACTS:

The state of Iowa DOT evaluates applications demonstrating past, present, and future initiatives to adjusting and incorporating efforts to reduce climate impacts. These initiatives are energy efficiency gains, zero waste initiatives, and reusing and recycling options.

WORKFORCE DEVELOPMENT:

Iowa DOT will position its best assets, Iowans, to safely operate and maintain new technologies/infrastructure applicable to this project. Iowa DOT will leverage existing partnerships with the various state agencies, community colleges, high schools, and trade organizations to develop labor and workforce strategies, programs, and opportunities.

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

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 (CO_2), 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 may report on the following outputs, but are not limited to:

- number of replaced or retrofitted engines/vehicles/equipment; and/or
- hours of idling reduced.
- engaging affected communities with respect to the design and performance of the project,
- the project's inclusion in a broader-based environmental or air quality plan;
- the implementation of contract specifications requiring the use of cleaner vehicles and equipment;
- a documented commitment to continue to identify and address air quality issues in the affected community;
- a publicly available community engagement plan for meaningful engagement of the affected communities regarding either the environmental and/or other issues that the project is intended to address;
- adoption of an idle reduction policy;
- providing support to clean diesel coalitions by sharing information, working with interested fleets, and addressing specific geographic needs;
- number of subawards; and/or
- dissemination of project/technology information via list serves,

websites, journals and outreach events.

Progress reports and a final report will also be outputs.

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.

EPA's Diesel Emissions Quantifier will be used to help estimate some of these expected outputs from the projects to be funded. Expected and potential outcomes may include, but are not limited to:

- tons of pollution reduced over the lifetime of the vehicles/engines/equipment, specifically:
    - fine particulate matter ($PM_{2.5}$),
    - nitrogen oxides (NO_x),
    - carbon monoxide (CO) and carbon dioxide (CO_2), and/or
    - volatile organic compounds (VOCs).
- tons of pollution reduced annually;
- lifetime total project cost effectiveness for NO_x and $PM_{2.5}$;
- lifetime capital cost effectiveness for NO_x and $PM_{2.5}$;
- net reduction in gallons of diesel fuel used;
- benefits to the communities affected by the project, including improvements to human health and the environment, the local economy, social conditions, and the welfare of residents in such communities
- community engagement and partnership;
- improved ambient air quality;
- health benefits achieved;
- changes in driver behavior regarding idling practices;
- an increased understanding of the environmental or economic effectiveness of the implemented technology;
- increased public awareness of project and results;
- widespread adoption of the implemented technology;
- demonstration and deployment of zero and near-zero emission vehicles and engines; and/or
- emissions reductions along freight transportation corridors.

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BUDGET NARRATIVE

2024 Itemized Project Budget

Budget Category	EPA Allocation	Mandatory Cost-Share	Voluntary Match (if applicable)		Line Total
			VW Mitigation Trust Funds	Other Funds	
1. Personnel					
2. Fringe Benefits					
3. Travel					
4. Equipment					
5. Supplies					
6. Contractual					
7. Other	$594,090		$396,060		
8. Total Direct Charges (sum 1-7)					
9. Indirect Charges					
10. Total (Indirect + Direct)					
11. Program Income					

2024 Itemized Project Budget

Budget Category	EPA Allocation	Mandatory Cost-Share	Voluntary Match (if applicable)		Line Total
			VW Mitigation Trust Funds	Other Funds	
1. Personnel					
2. Fringe Benefits					
3. Travel					
4. Equipment					
5. Supplies					
6. Contractual					
7. Other					
8. Total Direct Charges (sum 1-7)					
9. Indirect Charges					
10. Total (Indirect + Direct)					
11. Program Income					

[*Explanation of Budget Framework*

- ***Personnel -*** None
- ***Fringe Benefits -*** None
- ***Travel -*** None
- ***Supplies -*** None
- ***Equipment -*** None
- ***Contractual -*** None
- ***Other –*** Funding will be provided to program beneficiaries to be used only for the purchase and installation of diesel reduction strategy technologies (i.e. retrofit equipment, vehicle replacement, etc.). All program beneficiaries will be required to enter into a written agreement with the Iowa DOT.
- ***Indirect Charges –*** None

Administrative Costs Expense Cap

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

Matching Funds and Cost-Share Funds

Iowa DOT has chosen 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 program beneficiary awarded funding will be responsible for meeting the minimum cost-share. Requirements for the cost-share will be identified in the written agreement between the project partner and the Iowa DOT.

The Iowa Department of Transportation anticipates the following eligible technologies:

- Vehicle or Equipment Replacement with EPA Certified Engine
  - 2 to 4 projects with a mandatory cost share of 75%
- Vehicle or Equipment Replacement with CARB Certified Low NOx Engine
  - 2 to 4 projects with a mandatory cost share of 65%
- Vehicle or Equipment Replacement with Zero-tailpipe Emission Power Source
  - 2 to 6 projects with a mandatory cost share of 55%
- Engine Replacement with EPA Certified Engine
  - 1 to 2 projects with a mandatory cost share of 60%

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.