

APPENDIX D-4
Beneficiary Eligible Mitigation Action Certification

State of Nebraska
Funding Request #1

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).

See Attachment B, Eligible Mitigation Action Management Plan, page 12.

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 Nebraska, 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: July 5, 2018

Kara Valentine
Deputy Director, Air & Land

[NAME]
[TITLE]

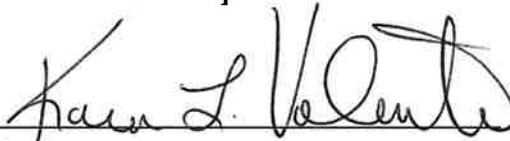
Nebraska Department of Environmental Quality

[LEAD AGENCY]

for

State of Nebraska

[BENEFICIARY]



Signature

ATTACHMENT B
PROJECT MANAGEMENT PLAN

This funding request will provide advance funds to the Nebraska Department of Environmental Quality (NDEQ), enabling the Department to provide rapid reimbursement to recipients of 2017 Nebraska Clean Diesel Rebates under the U.S. Environmental Protection Agency’s (EPA) 2017 DERA State Grant Program. The actions covered by this funding request are consistent with Eligible Mitigation Action 10 (DERA Option) of the State Trust Agreement and with Nebraska’s Beneficiary Mitigation Plan (pages 5 and 8-10), which allocates up to 25% of available funds to DERA projects.

Nebraska DEQ elected to fund DERA rebates to individual Clean Diesel Rebate recipients using either federal funds or voluntary state matching funds obtained through the Volkswagen Diesel Emission Environmental Mitigation Trust for States (VW State Trust). The subprojects in this funding request are those DERA rebates being funded entirely by the voluntary state matching funds from the VW State Trust.

REBATES FUNDED THROUGH THIS REQUEST

Two types of DERA rebates will be funded through this request:

1) Urban Diesel Refuse Truck Replacements

Under DERA Eligible Diesel Emission Reduction Solution 7 (Vehicle and Equipment Replacements), NDEQ is providing rebates for replacement of eligible diesel refuse trucks by a:

- a) New diesel-fueled truck certified to meet EPA emissions standards (25% reimbursement up to a maximum set by NDEQ of \$70,000).
- b) New Compressed Natural Gas-fueled truck certified to meet California Air Resources Board Optional Low-NOx Standards (35% reimbursement up to a maximum set by NDEQ of \$105,000).

Recipients of the refuse truck replacement rebates that will be funded by this request are:

Waste Management Nebraska (Papillion Sanitation), 1 diesel replacement truck:	\$ 70,000.00
S2 Rolloffs, 2 diesel replacement trucks:	\$ 128,718.08

2) Non-Road Agricultural Diesel Engine Replacements

Under DERA Eligible Diesel Emission Reduction Solution 6a (Certified Engine Replacement; Locomotive, Marine, and Nonroad Diesel Vehicles and Equipment), NDEQ is providing rebates for:

- a) replacement of a diesel engine powering a surface agricultural irrigation pump by an electric motor
- b) replacement of a diesel engine and generator supplying power to a submersible agricultural irrigation pump by direct connection of the subsurface pump to the electric grid.

Following DERA guidance, NDEQ is providing reimbursement of 60% of the cost of equipment and labor for these replacement projects, including the cost of extending electrical service to the pump site. NDEQ set a maximum rebate amount of \$16,200 for these projects.

Recipients of the irrigation engine replacement rebates that will be funded by this request are:

Cockerill Fertilizer, replacement electric motor and electric line extension	\$ 16,200.00
Robert Fuchtman, electric line extension and connection to submersible pumps	\$ 16,200.00
Mike Phillips, replacement electric motor and electric line extension	\$ 16,200.00
Frederick T. Schultz, replacement electric motor and electric line extension	\$ 10,424.62

Beneficiary Eligible Mitigation Action Certification – Nebraska Funding Request #1

	Fleet Information	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
CURRENT VEHICLE INFORMATION	Fiscal Year of EPA Funds Used:	2017	2017	2017	2017	2017	2017
	Vehicle Or Engine Group Name:	S2 Rolloffs	Papillion Sanitation	Phillips Irr	Schultz Irr	Fuchtmann Irr	Cockerill Irr
	Fleet Owner:	S2 Rolloffs	Waste Connections	Mike Phillips	Frederick T. Schultz	Robert Fuchtmann	Cockerill Fertilizer
	Vehicle or Engine Group Type:	On Highway	On Highway	NonRoad	NonRoad	NonRoad	NonRoad
	Primary Place of Performance						
	- State(s):	Nebraska	Nebraska	Nebraska	Nebraska	Nebraska	Nebraska
	- County:	Dodge, Douglas	Sarpy	Morrill	Antelope	Knox	Logan
	- City:	Fremont	Papillion	Lisco	Clearwater	Creighton	Gandy
	- Zip Code:	68025	68046	69148	68756	68729	69120
	Target:	Refuse Hauler	Refuse Hauler	Stationary	Stationary	Stationary	Stationary
	Vehicle Class or Equipment Type:	Class 8	Class 8	Stationary - Irrigation	Stationary - Irrigation	Stationary - Irrigation	Stationary - Irrigation
	Quantity:	2	1	1	1	1	1
	Vehicle Identification Number(s):	5SXHANCY57RY77192 5SXHANCY57RY77189	1HTWGAZR26J29040 6	N/A	N/A	N/A	N/A
	Vehicle Make:	LaFrance	International	N/A	N/A	N/A	N/A
	Vehicle Model:	Condor	7400	N/A	N/A	N/A	N/A
	Vehicle Model Year:	2007	2006				
	Engine Serial Number(s) :			135020	534532	507095	T06068T870679
	Engine Make:	Cummins	International	Isuzu	Iveco	Iveco	John Deere
	Engine Model:	563J	DT570	6BGITQW	F4GE9684A*J	F4GE9684A*J	6068TF250
	Engine Model Year:	2006	2005	2001	2008	2007	2001
	Engine Tier:			Tier 1	Tier 3	Tier 3	Tier 1
	Engine Horsepower:	330	285	125	173	173	185
	Engine Cylinder Displacement:	1.47	1.56	1.08	1.12	1.12	1.14
	Engine Number of Cylinders:	6	6	6	6	6	6
Engine Family Name:	6CEXH0540LAJ	5NVXH0570AEA	1SZXL06.5BTA	8VEXL06.7DAA	7VEXL06.7DAA	1JDXL06.8014	
Engine Fuel Type:	ULSD	ULSD	ULSD	ULSD	ULSD	ULSD	
Annual Amount of Fuel Used:	16,395; 13,974	5,000	8,000	4,000	5,800	4,050	
Annual Miles Traveled:	43,883; 40,409	15,900	N/A	N/A	N/A	N/A	
Annual Idling Hours:	520	1000	N/A	N/A	N/A	N/A	
Remaining Life:	8	10	15	10	10	10	
Year of Upgrade Action:	2018	2018	2018	2018	2018	2018	
Upgrade Type:	Vehicle Replacement	Vehicle Replacement	Engine Replacement	Engine Replacement	Engine Replacement	Engine Replacement	
Upgrade:	Vehicle Replacement: Diesel	Vehicle Replacement: Diesel	Engine Replacement: All Electric	Engine Replacement: All Electric	Engine Replacement: All Electric	Engine Replacement: All Electric	
Upgrade Cost Per Unit:	\$ 57,436.14	\$ 291,568.00	\$ 30,170.60	\$ 17,374.38	\$ 33,761.00	\$ 35,608.75	
New Engine Model Year:	2018	2018	2018	2018	2018	2018	
New Engine Horsepower:	370	360	NA	NA	NA	NA	
New Engine Cylinder Displacement:	1.8 Liters	1.5 Liters	NA	NA	NA	NA	
New Engine Number of Cylinders:	6	6	NA	NA	NA	NA	
New Engine Family Name:	PACCAR MX-11	PACCAR PX-9	NA	NA	NA	NA	
New Engine Fuel Type:	ULSD	ULSD	NA	NA	NA	NA	
Annual Diesel Gallons Reduced:	0	0	4000	8000	5800	4050	

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PROJECT SCHEDULE AND TIMELINE, 2017 NEBRASKA CLEAN DIESEL PROGRAM

Project Milestone	Date
NDEQ posts program information and application materials on agency website	6 October 2017
Initial deadline for submission of applications	15 December 2017
Selection and notification of first set of rebate recipients	16 December 2017
Finalization of agreements with first set of rebate recipients	January 2018
Extended deadline for submission of applications	15 February 2018
Selection and notification of second set of rebate recipients	28 February 2018
Finalization of agreements with second set of rebate recipients	March-April 2018
NDEQ submits Project Certification and Funding Direction for Advance Funding	July 2018
Trustee allocates Advanced Funding to NDEQ	2018 Qtr 3
NDEQ reviews reimbursement requests from recipients and provides payment for projects as completed	2018 Qtr 3-4
NDEQ reports project completion	31 December 2018

PROJECT BUDGET OVERVIEW*

Subproject	Total Budget Amount	Share of Total Budget to be Funded by the Trust	Cost-Share to be Paid by Project Recipient
Diesel Refuse Truck Replacements:			
Waste Connections Nebraska	\$ 291,568.00	\$ 70,000.00	\$ 221,568.00
S2 Rolloffs	\$ 514,872.00	\$ 128,718.08	\$ 386,154.20
Diesel Irrigation Engine Replacements:			
Cockerill Fertilizer	\$ 43,823.75	\$ 16,200.00	\$ 27,623.75
Robert Fuchtmann	\$ 33,761.00	\$ 16,200.00	\$ 17,561.00
Mike Phillips	\$ 30,170.60	\$ 16,200.00	\$ 13,970.60
Frederick T. Schultz	\$ 17,374.38	\$ 10,424.62	\$ 6,949.76
Administrative Costs Program planning, development, outreach, and administration	\$ 29,500.00	\$29,500.00	
TOTALS	\$ 961,069.73	\$ 287,242.70	\$ 673,827.31

* See detailed budget breakdown by budget category on following page

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DETAILED PROJECT BUDGET FOR 2017 DERA SUBPROJECTS FUNDED BY VOLKSWAGEN STATE TRUST

DIESEL REFUSE TRUCK REPLACEMENTS		25% reimbursement of cost for replacement diesel refuse truck, maximum \$70,000 per truck					
Recipient	Project	Equipment			Total Project Cost	Share to be Funded by the Trust	Cost-Share to be Paid by Recipient
Waste Connections Nebraska	Replacement of 1 diesel refuse truck	\$291,568.00			\$291,568.00	\$ 70,000.00	\$ 221,568.00
S2 Rolloffs	Replacement of 2 diesel refuse trucks	\$514,872.00			\$514,872.00	\$ 128,718.08	\$ 386,154.20
DIESEL IRRIGATION ENGINE REPLACEMENTS		60% reimbursement of cost of replacement electric motor, installation, and extension of electric service lines (maximum \$16,200.00).					
Recipient	Project	Equipment	Installation	Net Cost of Service Line Extension*	Total Project Cost	Share to be Funded by the Trust	Cost-Share to be Paid by Recipient
Cockerill Fertilizer	Replacement electric motor	\$ 6,815.00	\$ 1,400.00	\$ 35,608.75	\$ 43,823.75	\$ 16,200.00	\$ 27,623.75
Robert Fuchtman	Electric infrastructure and line extension to submersible pump		\$ 1,131.00	\$ 32,630.00	\$ 33, 761.00	\$ 16,200.00	\$ 17,561.00
Mike Phillips	Replacement electric motor	\$ 6,600.00	\$ 4,600.00	\$ 18,970.60	\$ 30,170.60	\$ 16,200.00	\$ 13,970.60
Frederick T. Schultz	Replacement electric motor	\$ 4,700.00	\$ 11,809.38	\$ 865.00	\$ 17,374.38	\$ 10,424.62	\$ 6,949.76
SUBTOTAL		\$ 824,555.00	\$ 18,940.38	\$ 88,074.35	\$ 931,569.73	\$ 257,742.70	\$ 637,827.31
ADMINISTRATIVE					\$ 29,500.00	\$ 29,500.00	
TOTAL					\$ 961,069.73	\$ 287,242.70	\$ 637,827.31

* Total cost of electric service line extension minus incentive from electric service provider.

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PROJECTED TRUST ALLOCATIONS

	2018
1. Anticipated Annual Project Funding Requests to be paid through the Trust. Funding Request 1: 2017 DERA Projects: \$ 287,243 Funding Request 2: Transit bus replacements: \$ 1,286,076 Funding Request 3: School bus replacements: \$ 1,071,730 TOTAL:	\$ 2,645,0050
2. Anticipated Annual Cost Share Funding Request 1: 2017 DERA Projects: \$ 673,827 Funding Request 2: Transit bus replacements: \$ 2,235,165 Funding Request 3: School bus replacements: \$ 1,020,696 TOTAL:	\$ 3,819,688
3. Anticipated Total Project Funding by Year (line 1 plus line 2) Funding Request 1: 2017 DERA Projects: \$ 961,070 Funding Request 2: Transit bus replacements: \$ 3,460,000 Funding Request 3: School bus replacements: \$ 2,092,426 TOTAL:	\$ 6,513,496
4. Cumulative Trustee Payments Requested/Made to Date Against Cumulative Approved Beneficiary Allocation	\$ 0
5. Current Beneficiary Project Funding to be paid through the Trust	\$ 287,242.70
6. Total Funding Allocated for Beneficiary, inclusive of Current Action (line 4 plus line 5)	\$ 287,242.70
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$ 12,248,347.48
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 7 minus line 6)	\$ 11,961,104.78

Beneficiary Eligible Mitigation Action Certification – Nebraska Funding Request #1

ANTICIPATED DIESEL EMISSION REDUCTIONS RESULTING FROM THIS PROJECT

Anticipated diesel emission reductions for this project were estimated using the EPA Diesel Emission Quantifier (<https://www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq>).

Annual Emission Reductions (short tons)

Project Category	NO_x	PM_{2.5}	Hydrocarbons	CO
3 Diesel Refuse Truck Replacements	1.011	0.094	0.083	0.331
6 Diesel Irrigation Engine Replacements	1.079	0.077	0.067	0.232
TOTALS	2.090	0.171	0.150	0.563

Lifetime Emission Reductions (short tons)

Project Category	NO_x	PM_{2.5}	Hydrocarbons	CO
3 Diesel Refuse Truck Replacements	10.109	0.94	0.834	3.307
6 Diesel Irrigation Engine Replacements	11.289	0.839	0.737	2.494
TOTALS	21.938	1.779	1.571	5.801

HOW THESE ACTIONS WILL MITIGATE THE IMPACT OF NO_x EMISSIONS ON COMMUNITIES THAT HAVE BORNE A DISPROPORTIONATE SHARE OF ADVERSE IMPACTS

Two of the new cleaner replacement refuse trucks (owned by S2 Rolloffs) will operate in Douglas County (in the Omaha metropolitan area) and Dodge County, which have both been designated by EPA as priority counties for diesel emission reductions through the DERA program due to historically high diesel emissions. The replacement truck operated by Waste Connections (Papillion Sanitation) will operate in Sarpy County, which is also within the densely populated Omaha metropolitan area.

ATTACHMENT C

**DETAILED PLAN FOR REPORTING ON
ELIGIBLE MITIGATION ACTION IMPLEMENTATION**

The Nebraska Department of Environmental Quality (NDEQ) will provide detailed reporting on this funding request under Eligible Mitigation Action 10 (DERA option) in three ways: 1) timely updates to NDEQ’s Volkswagen Environmental Mitigation Trust – Nebraska Diesel Emission Mitigation Program web pages and Clean Diesel Program (DERA) web pages; 2) quarterly reports submitted to the Environmental Protection Agency (EPA) on the Fiscal Year 2017 Clean Diesel State Grant; and 3) semi-annual reports to the Trustee as required by subparagraph 5.3 of the Environmental Mitigation Trust Agreement for State Beneficiaries.

NDEQ Website

NDEQ maintains a series of webpages describing the Nebraska Diesel Emission Mitigation Program under the Volkswagen Diesel Emissions Environmental Mitigation Trust for State Beneficiaries. The main webpage, which outlines the mitigation actions eligible for funding and their status, can be found at <http://deq.ne.gov/NDEQProg.nsf/OnWeb/AirVW>. Copies of funding request certifications to the Trustee will be available through this web page. Separate web pages for individual project categories are being developed and posted as funding programs open; these pages will track the status, progress, and results for projects under these funding categories. A separate web page on the Nebraska Clean Diesel Rebate Program (<http://deq.ne.gov/NDEQProg.nsf/OnWeb/NCDGP>) is maintained and includes lists of rebate recipients and rebate amounts for current and past projects, as required by the Clean Diesel State Grant (DERA program).

All application materials, reimbursement requests, and required documentation submitted by applicants and rebate recipients for Nebraska’s DERA program are archived in Nebraska’s Enterprise Content Management (ECM) system and are available to the public through a Public Records Search web page accessed through the NDEQ website.

DERA Quarterly Reports

NDEQ has and will continue to submit quarterly reports to the Environmental Protection Agency (EPA) on the progress of projects under the 2017 Clean Diesel State Grant Program (DERA). These reports include technical details of the individual diesel emission reduction projects (vehicles and equipment being replaced as well as the replacement vehicles and equipment), estimates of emissions reductions, project progress and timelines, and financial reporting.

Semi-Annual Reports to the Trustee

As required by subparagraph 5.3 of the Environmental Mitigation Trust Agreement for State Beneficiaries, NDEQ will submit a report to the Trustee within 6 months of the first disbursement and thereafter no later than January 30 and July 30 for the preceding 6-month periods. These reports will describe the progress implementing this and any other Eligible Mitigation Action ongoing during the reporting period. These reports will include a summary of all costs expended and a complete description of the status (including the actual or projected termination date), development, implementation, and any modification of the Eligible Mitigation Action. Reports covering the DERA program actions described in this funding request will include the quarterly reports to EPA described above. These semi-annual reports to the Trustee will be posted on the NDEQ website for public access.

ATTACHMENT D

**DETAILED COST ESTIMATES FROM SELECTED VENDORS
FOR EACH PROPOSED EXPENDITURE EXCEEDING \$25,000**

Page 15: Quote for S2 Refuse from Custom Truck Equipment for \$257,436.14 for each of two refuse trucks to be purchased under this project.

Page 16: Quote for Waste Connections Nebraska (Papillion Sanitation) from McNeilus – MN Refuse for two refuse trucks at \$291,568.00 each, total price \$583,136.00. Replacement of only one of these two trucks is being funded under this request (\$291,568.00).



February 13, 2018


Quote# 1889GS-R

S2 Refuse
220 West Cloverly Rd
Fremont, NE 68025
Mitch Sawyer
Ph# 402-306-2531

1	Bridgeport Manufacturing 32 Cu Yd Ranger Automated Side Loader Complete With All Standard Equipment Including: Front Mount Pump Or Hot Shift PTO, LED Lights, Strobe Light, Strobe Array, Work Lights, Self-locking Tailgate W/Rubber Seal & Props. Pneumatic Hopper Fold Down Door, Hopper Cleanout Doors W/Cart Removal Tool, Body Props, Hoist & Tailgate Safety Valve, Hardox Transitional Floor Liner, Hardox 600 Elevator Wear Strips, 96" Reach Arm W/Rubber Grips, Joystick & Rocker Switch Arm Controls, Arm Alarm With The Following Options: Safety – Camera System - 2 Camera System Hopper – Hydraulic Crusher Panel Controls – Outside Mounted Controls Streetside Installed On Below Peterbilt Chassis	\$ 95,604.05
1	Freight To Deliver Completed Unit	\$ 2,058.00
1	2018 Peterbilt 320 RHD Chassis – See Attached Peterbilt Spec	\$ 129,555.00
1	Freight In – Peterbilt	\$ 3,200.00
	Sub-Total	\$ 230,417.05
	12% FET	\$ 27,019.09
	Total	\$ 257,436.14

Delivery from Bridgeport will be 45 days after receipt of chassis. CTE will be deliver unit to Fremont, NE after PDI is complete in Omaha.

Thank you,
Custom Truck Equipment, Inc.


Gene Schaffer
Sales Manager – Truck Equipment

Plus Applicable Taxes
We accept the above quotation as a firm order.

Buyer:

WCNX Order Confirmation



Final User: Wcnx-Papillion Sanitation
10810 South 144th St
Omaha, NE, 68138

Date: 11/1/2017
 Division #:
 DOT #:
 PHONE #:
 Pricing Year: 2017
 Delivery Month: Mar-18

McNeilus Branch MN Refuse
 Sales Rep Andy Cox

Quote # 05F201710101256 - Rev 1

PO / VIN / Unit
Unknown / 197988 /

PO / VIN / Unit
Unknown / 197989 /

Product Description

Chassis Model 18 PP2-PX9 - Peterbilt 520 RH 6x4 (Paccar PX9) \$129,796

Wheel Base 215
 Tag Spacing 0
 Pusher Spacing 0

Body Model Model 2848: ZR Zero Radius ASL 28 yard \$116,334

Option Description

No FET

Paint Scheme Description:

Option Description	No FET
Flashing Warning for Body/TG/Arm Raised	incl.
XWear Overlay on Packer Shoes and Track	incl.
Monitor Mount Between Seats, Swivel	incl.
Third Eye, 7" Color Monitor, 3 Cameras	incl.
Hydraulic Service Lift	incl.
Center Stop Light	incl.
Fire Extinguisher, 20 lb., Body Mounted, Curbside	incl.
Guard, Hopper Light/Camera	incl.
Mudflaps, Front: Black w/McNeilus Logo	incl.
Shovel, Plastic, 11"	incl.
Paint Body: Two Colors	incl.
Fire Extinguisher in Cab, 5 lb.	incl.
Safety Triangle Kit in Cab	incl.
Allison 4500 - 5 year limited warranty	incl.
Automated Arm: WM Yellow	\$681
Hydraulic Line Cover, Under Body, Rear	\$119
Toolbox on ICC Bumper, 14Hx24Wx15D, Alum	\$768
Outside Controls, Curbside Under Seat	\$1,794
Hopper Cover Panel with Brush Skirt	\$484
Hopper Floor Liner, 1/4 in AR400	\$1,630
BP Castrol ISO48 Hydraulic Fluid (Dual Range)	\$271
Guard, Hydraulic Piston Pump	\$61
Arm Work Light: Fender Mounted, LED	\$276
Smart Lights, Six 4" amber flashing on TG and Cntr Stop Brkt; Two Oval on	\$1,560
Broom Holder on Body	\$199
Broom, One (1)	\$160
Cleanout Hoe Body Mount	\$199
Cleanout Hoe, Body Mounted	\$123
Shovel Holder on Curb Side Hopper Wall	\$242
Spill Kit on Body, 17 gallon	\$199
112231 5 year cummins engine warranty and 5 year emission warranty, 15	\$3,325
Remote Constant Mesh with CV Driveshaft Street Side	\$1,057
Transmission / PTO Guard	\$63

Qty: 2

Option Sub Total	\$13,249
Ext. Warranties	\$1,118
Option Discount	\$23
Selling Price	\$260,520
FET	\$30,372
SubTotal	\$290,892
Freight	\$676
Surcharge	
Total Unit Price	\$291,568
Quantity	2
Total Selling Price	\$583,136

Item	Price
Body and/or Chassis	\$246,130
Major Options	\$13,272
Body Ext. Warranty	\$0
Engine Ext. Warranty	\$0
Transmission Ext. Warranty	\$1,118
Freight	\$676
SubTotal	\$261,196
FET	\$30,372
Total Unit Price	\$291,568
Quantity	2
Total Selling Price	\$583,136

Notes:

WCNX Site Acceptance / Date

 3 Nov 17

Corporate Fleet Acceptance / Date

ATTACHMENT E

DERA OPTION

NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY
FISCAL YEAR 2017 STATE CLEAN DIESEL GRANT PROGRAM
WORKPLAN AND BUDGET NARRATIVE

Beneficiary Eligible Mitigation Action Certification – Nebraska Funding Request #1
Attachment E: 2017 State Clean Diesel Grant Program Workplan and Budget Narrative

FISCAL YEAR 2017

STATE CLEAN DIESEL GRANT PROGRAM

WORK PLAN AND BUDGET NARRATIVE

NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

7 JUNE 2017

INSTRUCTIONS: States and territories applying for FY 2017 DERA State Clean Diesel Grant Program funding must use this template to prepare their Work Plan and Budget Narrative.

Please refer to the FY 2017 STATE CLEAN DIESEL PROGRAM INFORMATION GUIDE for full Program details, eligibility criteria and funding restrictions, and application instructions.

**Beneficiary Eligible Mitigation Action Certification – Nebraska Funding Request #1
Attachment E: 2017 State Clean Diesel Grant Program Workplan and Budget Narrative**

SUMMARY PAGE

Project Title: 2017 Nebraska Clean Diesel Rebate Program

Project Manager and Contact Information

Organization Name: Nebraska Department of Environmental Quality

Project Manager: Randy Smith

**Mailing Address: Nebraska Department of Environmental Quality, 1200 N Street, Suite
400, Lincoln, NE 68509**

Phone: 402-471-4272

Fax: 401-471-2909

Email: randy.smith@nebraska.gov

Project Budget Overview:

	FY 2017
EPA Base Allocation	\$ 228,201
State or Territory Matching Funds (if applicable)*	\$ 228,201
EPA Match Incentive (if applicable)	\$ 114, 100
Mandatory Cost-Share	\$ 951,200
TOTAL Project	\$ 1,530,323
Additional Leveraged Resources	\$ 0

*** Contingent upon availability of funds from the Volkswagen Environmental Mitigation Trust**

Project Period

October 1, 2017 – September 30, 2018

Summary Statement

Insert a brief paragraph that summarizes the proposed project. Please include the state webpage URL that details past DERA State Clean Diesel Program projects, if applicable.

The Nebraska Department of Environmental Quality (NDEQ) is developing alternative project plans contingent upon the availability of Volkswagen (VW) Environmental Mitigation Trust funds for the voluntary State match. In both scenarios, NDEQ proposes to award rebates for replacement of diesel vehicles such as refuse trucks and school buses. Priority will be given to replacement of diesel refuse trucks operating in urban areas by vehicles with low-NOx Compressed Natural Gas (CNG) engines. If Trust funds are available to Nebraska, NDEQ will increase the number of rebates available for refuse truck and school bus replacements, and also offer rebates for replacement of off-road diesel engines powering irrigation pumps, with replacement equipment restricted to electric motors and related infrastructure.

SCOPE OF WORK

This section is a discussion of the state's or territory's plan to develop and implement grant, rebate, and/or loan programs and how these programs meet state or territory goals as they relate to the reduction of diesel emissions.

The scope of work should contain a detailed project description, including the following categories and information.

STATE/TERRITORY GOALS AND PRIORITIES: A description of the air quality within the state or territory, the quantity of air pollution produced by the diesel fleet in the state or territory, and the primary sectors (e.g. highway, marine vessels, construction equipment) that make up the state's or territory's diesel fleet (both public and private).

All areas of Nebraska are currently in attainment with the National Ambient Air Quality Standards (NAAQS). The Omaha and Lincoln metropolitan statistical areas (MSAs) are the largest urbanized areas within the state and have pollution potential inherent to such areas. Ozone levels approaching the ozone NAAQS (0.70 ppm) have been experienced at times in the northeastern fringe of the Omaha MSA.

According to the 2014 National Emissions Inventory, diesel vehicles and equipment in Nebraska were responsible for 124,481 tons of annual NOx emissions, 5,510 tons of PM₁₀, and 5,177 tons of PM_{2.5}, primarily from heavy-duty diesel highway vehicles, locomotives, and non-road diesel equipment. Diesel sources are responsible for two-thirds of the NOx emissions in the state.

Nebraska cities have taken action over the last decade to reduce diesel emissions. StarTran, the transit bus agency in Lincoln, has introduced 11 compressed natural gas (CNG) buses and 11 CNG Handi-Vans to its fleet, replacing older diesel vehicles. CNG vehicles now make up over one-third of the StarTran fleet. Beginning in the fall of 2014, the Omaha and Millard (suburban Omaha) public school districts began using 435 new propane-powered buses to transport students, providing significant emissions reductions and reduced health impacts on the students.

However, many older diesel buses and trucks are still in operation in Nebraska. Many older diesel refuse trucks operate in urban areas. These vehicles operate daily through residential and commercial areas, at low speeds, with frequent starts and stops, and a high proportion of time spent idling. Refuse trucks therefore make a significant contribution to diesel emissions in urban areas.

In addition, there are currently over 3,500 school buses in use throughout Nebraska, many of which are older diesel vehicles. According to SchoolBusFleet.com, during the 2014-15 school year approximately 78,900 children in Nebraska were transported daily in school buses that, in total, traveled over 33,400,000 route miles during the year. Children who ride school buses are exposed to a disproportionate amount of diesel exhaust and are more vulnerable than adults to the harmful effects of this exhaust, which can include decreased lung growth and the development or exacerbation of asthma.

New buses and trucks with engines that meet EPA emissions standards drastically reduce these harmful emissions. Replacement of school buses and refuse trucks with new cleaner diesel, alternative-fueled, or electric buses is thus a priority of the Nebraska Clean Diesel Program.

As of October 2016, Nebraska had over 99,000 active irrigation wells, many of which have pumps powered by diesel engines. Although these engines are in rural areas, they operate during the warmer months of the year when formation of ozone from diesel exhaust is at a maximum. Exhaust from this large number of diesel engines is a significant contributor to air pollution in rural areas. In addition, several counties on the DERA 2017 Priority County List have a large number of irrigation wells; these include Buffalo, Keith, Lincoln, and Scotts Bluff counties.

VEHICLES AND TECHNOLOGIES: A description of the eligibility, number, types and typical use, and ownership of vehicles, engines, and/or equipment targeted for emission reductions. Eligibility of vehicles is defined in Section VIII.B of the Program Guide. A description of all verified and/or certified technologies to be used or funded by the applicant. Eligibility of technologies is defined in Section VIII.C of the Program Guide.

NDEQ will award rebates for replacement of urban diesel refuse trucks and diesel school buses. If VW Trust funds are available, Nebraska will provide a voluntary DERA match in order to expand the number of these rebates, and also expand the program to include replacement of off-road diesel engines powering irrigation pumps. These plans will support the state of Nebraska's ongoing commitment to reduce diesel emissions in the more highly-populated areas of the state as well as other areas that have populations at higher risk of exposure to the harmful effects of diesel pollution.

Urban Refuse Truck Replacement:

NDEQ will offer rebates to assist eligible applicants with partial reimbursement of older diesel refuse trucks with trucks powered by:

- **a 2017 model year or newer, diesel or alternative-fueled engine certified to meet EPA emission standards (25% rebate);**
- **a 2017 model year or newer engine certified to meet CARB’s Optional Low-NOx Standards (35% rebate);**
- **an all-electric replacement (45% rebate).**

Eligible applicants will be municipalities and private contractors operating diesel refuse trucks in Nebraska communities. Priority will be given to projects in urban areas and to replacement vehicles with Low-NOx Compressed Natural Gas (CNG) engines (35% rebate). For the private companies that perform refuse pickup under contract to most Nebraska communities, this is a higher reimbursement rate than will be available under Options 1 or 6 of the Volkswagen Trust. Thus NDEQ feels that this will be an attractive option whether or not NDEQ is able to solicit projects under the Volkswagen Trust during the DERA grant year.

All entities that receive a rebate will be required to follow the scrappage requirements outlined in the FY2017 State Clean Diesel Grant Program Information Guide.

This program could provide up to 4 replacement CNG refuse trucks under the State Match scenario, or up to 2 replacement CNG refuse trucks under the no-match scenario.

School Bus Replacement:

This program will be used to provide rebates to assist eligible applicants with partial reimbursement for the replacement of an older diesel school bus with a bus powered by:

- **a 2017 model year or newer, diesel or alternative-fueled engine certified to meet EPA emission standards (25% rebate);**
- **a 2017 model year or newer engine certified to meet CARB’s Optional Low-NOx Standards (35% rebate);**
- **an all-electric replacement bus (45% rebate).**

Eligible applicants will be all Nebraska public school districts, private schools, and private entities that operate school buses under contract with a school district in the state of Nebraska. NDEQ may give preference to projects in counties shown in the EPA 2017 Priority County List.

Eligible school buses will be Class 5 through Class 8 school buses that are currently operational and in use and are powered by 1995 to 2006 model year diesel engines (1995 to 2009 for an all-electric replacement). All replacement school buses will be required to be in the same or lower vehicle weight class as the original bus, and must operate in the same manner and over similar routes as the original bus, unless otherwise approved by EPA. All

entities that receive a rebate will be required to follow the scrappage requirements outlined in the FY2017 State Clean Diesel Grant Program Information Guide.

This program could provide 2 to 5 school bus rebates depending upon the availability of matching funds and the demand for rebates in other programs. NDEQ is unsure if there will be interest from public schools in DERA replacement projects this year, given that a higher reimbursement rate will likely be available to public schools for school bus replacements under Option 2 of the Volkswagen Trust.

Off-Road Agricultural Diesel Engine Replacement:

This program will be offered if VW Trust funds are available to Nebraska to use as the voluntary state match. It will offer rebates to assist eligible applicants with the replacement of an off-road diesel engine with an electric motor and/or electric power source (60% rebate of equipment, labor, and electric power infrastructure costs).

NDEQ will give preference to replacements in counties on the DERA 2017 Priority County List.

Eligible applicants for replacement of an off-road diesel engine will be active farming operations in the state of Nebraska. Eligible engines must operate at least 500 hours annually and fall within the following horsepower (HP) and engine model year guidelines:

- 0 to 50 HP: 2005 and newer, Unregulated – Tier 2;
- 51 to 300 HP: 1995 and Newer, Tier 0 – Tier 3;
- 301-750 HP: 1985 and Newer, Tier 0 – Tier 3;
- 751+ HP: 1985 and Newer, Tier 0 – Tier 2.

All entities that receive a rebate will be required to follow the scrappage requirements outlined in the FY2017 State Clean Diesel Grant Program Information Guide.

This program could fund the replacement of 5 or more diesel irrigation pump engines by electric motors.

ROLES AND RESPONSIBILITIES: A discussion of the roles and responsibilities of the state or territory and any other project partners, contractors, or subgrantees. State and territories should indicate whether their Program funds will support grant, rebate, and/or loans, and provide a detailed description of their disbursement methodology. This section of the work plan should also describe any additional leveraged resources beyond any voluntary matching funds or mandatory cost-share funds included in the project budget.

NDEQ will use 2017 DERA funds to support two or more rebate programs to replace diesel vehicles and engines in Nebraska. NDEQ has successfully administered rebate programs with funding from EPA's Clean Diesel Program to reduce diesel emissions since 2008, including funding from the American Recovery and Reinvestment Act from 2009 to 2012. Projects funded prior to 2013 included diesel emission control retrofits, auxiliary power

units and aerodynamic equipment for long-haul trucks, diesel engine replacements, and vehicle replacements. Rebate recipients in these projects included both government and private-sector entities. Since 2013 NDEQ has administered an annual Clean Diesel School Bus Rebate Program. This experience demonstrates NDEQ's ability to successfully carry out varied diesel emissions reduction rebate programs.

Urban Refuse Truck Replacement:

NDEQ will provide notice of the Refuse Truck Rebate Program to public and private waste haulers in Nebraska via the agency website, press-release, and notices to trade associations. We will develop application materials, instructions, and selection criteria specific to this program and make them available on the agency website, and we will work with public agencies and private companies as they develop their applications. NDEQ will select the successful applicants and provide rebates directly to the recipients. The recipients will be expected to provide mandatory matching funds to complete the financial commitments required for their projects.

School Bus Replacement:

NDEQ will provide notice of the School Bus Rebate Program to public school districts and private schools in Nebraska via the agency website, press release, and by direct mail. Application and reimbursement forms and instructions will also be available on the Nebraska Clean Diesel Program pages on the agency website. NDEQ will develop selection criteria specific to this program, select the successful applicants, and provide rebates directly to the recipients. School districts and private schools will be expected to provide mandatory matching funds to complete the financial commitments required by their projects.

Off-Road Agricultural Diesel Engine Replacement:

NDEQ has established relationships with Natural Resource Districts (NRDs) in Nebraska. NRD staff have direct knowledge of irrigation patterns in their district and have working relationships with farmers. We plan to work with one or more NRDs that include counties on the 2017 DERA Priority Counties list to provide notice of the rebate opportunity, recruit rebate applicants, and provide advice on possible non-federal sources of funds to assist recipients with their mandatory match. NRD staff may also be involved with selecting award recipients.

NDEQ will develop application materials, instructions, and selection criteria specific to this program and make them available on the agency website. NDEQ will assist applicants during the application process, select the successful applicants for rebates, and provide rebates directly to the recipients. Recipients will be expected to provide mandatory matching funds to complete the financial commitments required for their projects.

General Administration and Disbursement Procedures

Rebate applicants will be required to attest that the engine or vehicle being replaced was not due for replacement due to normal attrition within three years of the project start date. The replacement vehicle or engine will be required to be of the same type and similar gross vehicle weight rating as the replaced unit. The replaced engine and vehicle will be required to be scrapped or rendered permanently disabled within 90 days of being replaced unless additional time is approved by EPA. Diesel engines will be scrapped by cutting a 3-in by 3-in hole in the engine block, or an equivalent scrapping method approved by EPA. A vehicle will be disabled by cutting the frame rails between the front and rear axles.

NDEQ will maintain frequent contact with the successful applicants and provide assistance as needed to ensure that they stay on track to complete their projects within the specified time frame. After the new vehicle or engine has been delivered or installed, and prior to receiving reimbursement, applicants will be required to submit extensive documentation of the purchase along with documentation of scrapping of the old vehicle or engine:

- 1. Completed “Request for Reimbursement” form**
- 2. Completed “Final Report” form**
- 3. Photocopy of the purchase order for the new vehicle/engine and/or photocopy of the invoice for the new vehicle/engine and photo of the new engine label with the following information:**
 - a. VIN number (for vehicle) or engine serial number (for replacement engine)**
 - b. Engine model year**
 - c. Engine manufacturer**
 - d. EPA engine family name**
 - e. Vehicle/engine cost**
- 4. Proof of Payment, such as a paid invoice or receipt, photocopy of the canceled check, bank statement showing the check has cleared, or credit card statement showing the payment has cleared**
- 5. Proof of scrapping of the old engine:**
 - a. Photo of the engine label that includes the engine serial number and EPA engine family name**
 - b. Photo of the engine block prior to scrapping**
 - c. Photo of the engine block after scrapping, showing the hole cut in the block**
- 6. Proof of scrapping of the old vehicle (if applicable):**
 - a. Side profile photo of the vehicle**
 - b. Photo of vehicle label with Vehicle Identification Number (VIN)**
 - c. Photos of chassis rails prior to scrapping**
 - d. Photos of chassis rails after cutting**

TIMELINE AND MILESTONES: A detailed timeline for the project including milestones for specific tasks, such as subgrant or rebate program development, solicitation of project partners,

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making subawards, program/project implementation, procurement and installation of equipment, monitoring and oversight of projects, and reporting.

NDEQ’s 2017 Nebraska Clean Diesel Rebate Program will begin as soon as the grant award is made. Public notice and outreach of the program will begin in advance of the October 1 start of the 2017 grant year. During the first quarter of the grant year, NDEQ will complete the solicitation and processing of rebate applications, will select rebate recipients, and finalize project contracts. Recipients will be notified at the beginning of the second quarter to commence work on their project. NDEQ will monitor project progress closely with the goal of some recipients completing their projects by the end of the second quarter. We anticipate that most recipients will complete their projects and receive reimbursements during the second and third quarters. NDEQ will follow the timeline below, assuming receipt of the EPA award in August:

September 1, 2017: NDEQ posts program information and application materials on the agency website and begins outreach to the target sectors.

October 1, 2017: NDEQ begins accepting rebate applications.

October 2017: Public meeting on irrigation engine replacement program in cooperation with a participating Natural Resource District, if applicable to the final program adopted.

November 3, 2017: Deadline for submission of rebate applications to NDEQ.

November 3-14, 2017: Review of rebate applications and selection of rebate recipients.

November 14, 2017: Notification of rebate recipients.

November 27-30, 2017: Contracts mailed to rebate recipients. Public notification of rebate projects posted on NDEQ website.

December 22, 2017: Deadline for rebate recipients to return signed contracts to NDEQ.

January 3, 2018: Commence Work letters mailed to recipients.

January –August 2018: Monitoring of rebate recipients for project progress, and issuance of rebates as projects are completed.

August 15, 2018: Deadline for recipients to complete their project and submit complete reimbursement requests with documentation of scrappage.

DERA PROGRAMMATIC PRIORITIES: A discussion of how, in providing grants, rebates, and loans under the Program, the state or territory will ensure that projects selected for funding supports the programmatic priorities as defined in Section VIII.D of the Program Guide.

NDEQ’s 2017 DERA Clean Diesel Rebate Programs will be targeted to achieve significant reductions in diesel emissions in areas designated as poor air-quality areas and/or emissions that lead to exposure of especially vulnerable populations.

Refuse Truck Replacement:

Diesel refuse trucks operate in all cities and towns in Nebraska. NDEQ will give preference to applicants operating in the urbanized counties designated as EPA Priority Counties for FY2017 on the basis of population exposure to diesel particulate emissions in the 2011 National Scale Air Toxics Assessment. Providing rebates to refuse haulers to replace older diesel trucks with newer and cleaner trucks will produce significant reductions in diesel emission in these priority areas.

School Bus Replacement:

Most applicants for Nebraska’s Clean Diesel School Bus Rebate Program have historically been smaller rural school districts. It is common for rural districts to bus students over long distances, especially for athletic events at other schools. These long travel distances with older buses increase the exposure of school children to diesel emissions from the bus tailpipe and engine crankcase. Consolidated school districts are typically in residential areas in more populated towns in the county; bus idling at the school and nearby bus depot therefore expose not only school children but also nearby residents to elevated levels of diesel emissions. Providing rebates to school districts to replace older, more highly polluting buses with new, cleaner buses is a cost-effective use of DERA funding to reduce diesel exhaust exposure for children and for communities.

Rural school districts also have fewer financial resources than larger districts in urban areas. Nebraska’s school bus rebate program has provided an important financial incentive that has inspired schools throughout the state to consider early replacement of older, more polluting buses.

Off-Road Agricultural Diesel Engine Replacement:

NDEQ will give preference to agricultural diesel engine replacements in counties on the DERA 2017 Priority County List, and require replacement with an electric motor. A number of predominantly rural Nebraska counties are EPA Priority Counties for 2017 on the basis of population exposure to diesel particulate emissions in the 2011 National Scale Air Toxics Assessment. These priority counties include Buffalo, Dodge, Gage, Jefferson, Keith, Lincoln, Platte, and Scotts Bluff counties. NDEQ will give preference to these counties and to projects that are in close proximity to population centers that might be affected by these diesel emissions.

EPA’S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS: A description of the environmental outputs and outcomes to be achieved under the Program, as defined in Section VIII.E of the Program Guide. To estimate some of the anticipated outcomes of the award (e.g. emissions reductions), EPA encourages states and territories to use the Diesel Emissions Quantifier found at: www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq.

Linkage: The actions outlined in this workplan support Goal 1, Objective 1.2, “Improve Air Quality”, of EPA’s 2014-2018 Strategic Plan. Reducing emissions from diesel engines is an important component of the reduction of local and regional air pollution, thereby supporting EPA’s goal to “achieve and maintain health-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants.” Replacement of older, more polluting diesel engines and buses with new, less polluting units reduces diesel emissions, thus directly reducing the local and regional risk from criteria pollutants (particulate matter, NO_x, and ozone), air toxics, and greenhouse gases.

Outputs: The primary output of this program will be replacement of older, more polluting diesel vehicles and engines with new, cleaner units. This output will be measureable in terms of the number of replacements funded and completed, which will depend upon the mix of replacement applications received and the replacement technologies proposed.

NDEQ will disseminate information about the program or programs and the available technologies via the agency website, mail, e-mail, and possibly public meetings. These public outreach efforts will raise community awareness of the importance of reducing diesel emissions.

NDEQ will track and measure the progress made by the rebate recipients and provide quarterly reports to EPA summarizing this progress. NDEQ will also provide a final report on the program to EPA.

Outcomes:

Nebraska’s proposed FY2017 Clean Diesel Rebate Program will produce significant reductions in diesel emissions and thereby reduce the exposure of vulnerable populations to these emissions. In addition, NDEQ’s outreach efforts will lead to increased community awareness of the importance and health benefits of emissions reductions, and will promote institutional behavioral changes to reduce diesel vehicle idling where possible.

Refuse Truck Replacements

Reducing refuse truck diesel emissions would have immediate impact in densely-populated urban areas that include a number of vulnerable populations, including the elderly, children, and people with respiratory conditions. Over the long term, these emissions reductions should lead to reduced respiratory disease and complications in these populations.

Table 2 below shows estimated reductions in emissions that would result from replacement of one refuse truck with a 2001 diesel engine by a new truck with a 2017 diesel engine. These estimates use default inputs in the Diesel Emissions Quantifier. For 2 to 4 such truck replacements, and assuming a 10-year remaining vehicle lifetime, the lifetime emission reductions for a diesel replacement could range from 9.32 to 18.64 tons of NO_x, 0.4 to 0.8 tons of PM_{2.5}, 0.43 to 0.86 tons of hydrocarbons, and 3.01 to 6.02 tons of carbon monoxide. However, NDEQ is planning to give preference to replacement vehicles with low-NO_x CNG engines, which would result in even greater lifetime reductions in NO_x compared to those

computed using the Diesel Emissions Quantifier (which does not currently model replacement of diesel engines with alternative-fuel engines).

Table 2: Estimated emission reductions from replacing one diesel refuse truck (2001 model year) with a new diesel truck with 2018 engine model year, from Diesel Emissions Quantifier using default input values: fuel use = 3,993 gal/yr, vehicle miles = 23,646 mi/yr, idling = 50 hr/yr.

Annual Results (short tons)	NOx	PM2.5	HC	CO
Baseline	0.493	0.020	0.023	0.158
Amount Reduced	0.466	0.020	0.022	0.15
Percent Reduced	94.4%	97.3%	92.5%	95.2%
Lifetime Results (short tons, assuming 10 year remaining lifetime)				
Baseline	4.935	0.204	0.235	1.578
Amount Reduced	4.658	0.199	0.217	1.503
Percent Reduced	94.4%	97.3%	92.5%	95.2%

School Bus Replacements

Table 3 below shows estimated reductions in emissions that would result from replacement of one school bus with a 2001 diesel engine by a new bus with a 2017 diesel engine. These estimates from the Diesel Emissions Quantifier used averaged input data from the nine 2016 Nebraska Clean Diesel School Bus Rebate Program recipients. For 2 to 5 such replacements, and assuming a 10-year remaining lifetime for the replaced bus, lifetime emissions reductions could range from 1.5 to 3.75 tons of NOx, 0.12 to 0.3 tons of PM_{2.5}, 0.32 to 0.8 tons of hydrocarbons, and 0.66 to 1.65 tons of carbon monoxide.

Table 3: Estimated emission reductions from replacing one diesel school bus (2001 model year) with a new diesel bus with 2017 engine model year, from Diesel Emissions Quantifier. Input data (average values from 2016 Nebraska Clean Diesel Rebate recipients): fuel use = 940 gal/yr, vehicle miles = 7,400 mi/yr, idling = 193 hr/yr.

Annual Results (short tons)	NOx	PM2.5	HC	CO
Baseline	0.081	0.006	0.017	0.036
Amount Reduced	0.075	0.006	0.016	0.033
Percent Reduced	92.5%	98.2%	95.5%	92.4%
Lifetime Results (short tons, assuming 10 year remaining lifetime)				
Baseline	0.81	0.06	0.17	0.36
Amount Reduced	0.75	0.06	0.16	0.33
Percent Reduced	92.5%	98.2%	95.5%	92.4%

The pollutant reductions achieved by replacing older, more polluting school buses with new cleaner vehicles will contribute to improved air quality for children riding in and waiting outside of buses and for residents living in close proximity to schools and bus depots. As a result, these pollutant reductions will contribute to a decrease in respiratory disease and complications for these groups.

Off-Road Agricultural Diesel Engine Replacements

Table 3 below shows estimated reductions in emissions that would result from replacement of one irrigation pump engine (2001 model year) by a 2017 diesel engine. These estimates use default inputs in the Diesel Emissions Quantifier. For 5 such replacements and a 13-year remaining engine lifetime, lifetime emissions reductions would be approximately 12.8 tons of NOx, 0.5 tons of PM2.5, 0.5 tons of hydrocarbons, and 2.0 tons of carbon monoxide. However, NDEQ will require replacement of an older diesel engine with an electric motor, which will reduce the on-site emissions to zero.

Table 3: Estimated emission reductions from replacing one irrigation pump diesel engine (2001 model year) with a new 2017 model year diesel engine. Results from Diesel Emissions Quantifier using default input values: fuel use = 1,760 gal/yr, 100 horsepower engine, usage rate = 749 hr/yr.

Annual Results (short tons)	NOx	PM2.5	HC	CO
Baseline	0.206	0.012	0.013	0.034
Amount Reduced	0.196	0.012	0.008	0.031
Percent Reduced	95.2%	97.2%	62.7%	90.9%
Lifetime Results (short tons, assuming 13 year remaining lifetime)				
Baseline	2.682	0.157	0.163	0.447
Amount Reduced	2.553	0.102	0.102	0.407
Percent Reduced	95.2%	97.2	62.7%	90.9%

NDEQ will give preference to irrigation engine replacements in counties on the EPA 2017 Priority County List, so the reductions in diesel emissions produced by these replacement projects will reduce the pollutant load in areas already affected by elevated diesel emissions. We will also give preference to projects close to population centers to maximize the health benefit to people residing in these counties.

SUSTAINABILITY OF THE PROGRAM: A description of the state’s or territory’s plan for sustaining the project beyond the assistance agreement period. Additionally, describe the state’s or territory’s plan for publicizing and promoting the benefits of the activities within the state or territory.

NDEQ will continue to promote (and assist stakeholders in finding) reasonable and practical solutions to reduce diesel emissions and consumption of diesel fuel. These efforts will include promoting behavioral changes to reduce idling of diesel engines at schools and educational efforts on the health benefits of replacing older diesel vehicles and engines. NDEQ will promote these ideas and practices on the agency website, via the AirNews listserv (through which we communicate air quality news to approximately 1,000 stakeholders), during NDEQ Air Update workshops/webcasts, and through distribution of informational brochures.

BUDGET NARRATIVE

This section of the work plan should include a detailed itemized budget proposal (in addition to the Standard Form 424A), using the example below. Justify the expenses for each of the categories being performed within the grant/project period. Indicate which costs will be paid by the state's or territory's allocation from EPA (which would include the bonus match, if applicable) and which costs will be paid by the state's or territory's voluntary matching funds, if applicable.

Applicants must **itemize** costs related to personnel, fringe benefits, travel, equipment, supplies, contractual costs, other direct costs, indirect costs, and total costs. If the project budget includes any cost-share, mandatory or voluntary, the budget detail portion of the work plan must include a detailed description of how the applicant will obtain the cost-share and how the cost-share funding will be used.

Mandatory cost-share funds must be in the form of cash contributions to the Equipment Category. If EPA accepts an offer for a voluntary cost-share, applicants must meet their sharing commitment in order to receive EPA funding. If the proposed cost-share is to be provided by a third-party, a letter of commitment is encouraged. Any form of cost-share included in the budget detail must also be included on the SF-424 and SF-424A.

Applicants should use the following instructions, budget category descriptions and example table to complete the budget detail section of the work plan. Detailed sample budgets representing various mandatory cost-share versus state voluntary match scenarios are available at: www.epa.gov/cleandiesel/clean-diesel-state-allocations.

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Itemized Project Budgets

FY 2017 – Plan A: State Voluntary Match			
Budget Category	EPA Allocation (\$ 228,201 + \$ 114,100 bonus = \$ 342,301)	Voluntary Match (if applicable) (\$ 228,201)	Mandatory Cost-Share (if applicable)
1. Personnel			
Project Manager, \$23/hr x 391 hrs	\$ 7,889	\$ 1,104	
Supervisor, \$50/hr x 120 hrs	\$ 6,000		
2. Fringe Benefits	\$ 4,182	\$ 331	
3. Travel			
4. Supplies			
5. Equipment			
6. Contractual			
7. Program Income			
8. Other			
<i>CNG refuse truck rebates, 35%</i>			
2 CNG refuse trucks @ \$300,000	\$ 210,000		\$ 390,000
2 CNG refuse trucks @ \$300,000		\$ 210,000	\$ 390,000
<i>School bus rebates, 25%</i>			
2 school buses @ \$85,000	\$42,000		\$ 128,000
<i>Irrigation electric motor rebates, 60%</i>			
4 irrigation pump motor/install @ 27,000	\$ 64,800		\$ 43,200
1 irrigation pump motor/install @ 27,000		\$ 16,200	\$ 10,800
9. Total Direct Charges	\$ 334,871	\$ 227,635	\$ 962,000
10. Indirect Charges	\$ 7,431	\$ 591	
Grand Total	\$ 342,301	\$ 228,226	\$ 962,000

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FY 2017 – Plan B, No Voluntary State Match			
Budget Category	EPA Allocation (\$ 228,201)	Voluntary Match (if applicable)	Mandatory Cost-Share (if applicable)
1. Personnel			
Project Manager, \$23/hr x 240 hrs	\$ 5,520		
Supervisor, \$50/hr x 50 hrs	\$ 2,500		
2. Fringe Benefits	\$ 2,406		
3. Travel			
4. Supplies			
5. Equipment			
6. Contractual			
7. Program Income			
8. Other			
<i>CNG refuse truck rebates, 35%</i>			
1 CNG Refuse Truck @ \$300,000	\$ 105,000		\$ 195,000
<i>School bus rebates, 25%, capped at \$21,000</i>			
5 school buses @ \$85,000	\$ 105,000		\$ 975,000
9. Total Direct Charges	\$ 220,426		\$ 1,170,000
10. Indirect Charges	\$ 4, 291		
Grand Total	\$ 224,717		\$ 1,170,000