

**APPENDIX D-4**  
**Beneficiary Eligible Mitigation Action Certification**

## BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

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Beneficiary State of Delaware

Lead Agency Authorized to Act on Behalf of the Beneficiary Department of Natural Resources and Environmental Control  
*(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)*

<b>Action Title:</b>	Forklift Replacements (6 Electric)
<b>Beneficiary's Project ID:</b>	Phase 4-Grubb Lumber
<b>Funding Request No.</b>	<i>(sequential)</i> 6
<b>Request Type: (select one or more)</b>	<input type="checkbox"/> Reimbursement <span style="float: right;"><input checked="" type="checkbox"/> Advance</span> <input type="checkbox"/> Other (specify): _____
<b>Payment to be made to: (select one or more)</b>	<input checked="" type="checkbox"/> Beneficiary <input type="checkbox"/> Other (specify): _____
<b>Funding Request &amp; Direction (Attachment A)</b>	<input checked="" type="checkbox"/> Attached to this Certification <input type="checkbox"/> To be Provided Separately

### SUMMARY

<b>Eligible Mitigation Action</b>	<input checked="" type="checkbox"/> Appendix D-2 item (specify): <u>Fork lifts (6 Electric forklifts w/ infrastructure)</u>
<b>Action Type</b>	<input type="checkbox"/> Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal): _____
<b>Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):</b> Please see Summary Attachment	
<b>Estimate of Anticipated NOx Reductions (5.2.3):</b> It is estimated that the State of Delaware will reduce 5.649 short tons NOx reductions with the electric forklift replacements.	
<b>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):</b> The Delaware Department of Natural Resources and Environmental Control	
<b>Describe how the Beneficiary will make documentation publicly available (5.2.7.2).</b> Please see Summary Attachment	
<b>Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8).</b>  Funded by the Trust - \$210,379.95 (45%) Funded by Project partner Grubb Lumber - \$257,131.05 (55%)	
<b>Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9).</b> Please see Summary Attachment	

## SUMMARY ATTACHMENT

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

The primary goal of the State of Delaware's Volkswagen Environmental Mitigation plan is to improve and protect ambient air quality by implementing eligible mitigation projects that will achieve significant and sustained reductions in NOx emission exposures in areas with poor air quality; areas with historical air quality issues; and areas that receive a disproportionate quantity of air pollution from diesel. The Delaware Department of Natural Resources and Environmental Control (DNREC) is partnering with Grubb Lumber to scrap and replace 6 diesel forklifts. The new forklifts will be replaced as electric and the purchase will include the electric charging infrastructure to operate the units. Grubb Lumber currently operates their existing diesel units 8-10 hours a day in a poorly served community in Wilmington. Grubb Lumber is committed to providing reliable, innovative, and efficient green solutions in protecting air quality and the community. Delaware's Volkswagen Environmental Mitigation Plan is attached to further support this funding request.

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

DNREC is partnering with Grubb Lumber to scrap and replace 6 diesel forklifts in an underserved community in Wilmington. The forklifts will be replaced with electric forklifts and the cost will include electric charging infrastructure. The lifetime emission reductions (in short tons) for the 6 forklifts are as follows:

**NOx – 5.649**

**HC – 0.046**

**CO – 0.160**

**PM2.5 – 0.004**

### **Describe How the Beneficiary will Make Documentation Publicly Available (5.2.7.2)**

Subparagraph 5.2.7.2 of the Environmental Mitigation Trust Agreement for State Beneficiaries requires that Beneficiaries include in their funding requests:

*A commitment by the Beneficiary to maintain and make publicly available all documentation submitted in support of the 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, together with an explanation of the procedures by which the Beneficiary shall make such documentation publicly available;*

DNREC is committed to maintaining and making publicly available all documentation submitted in support of the funding requests and all records supporting all expenditures of Eligible Mitigation Action funds. The public will be able to view funding requests on the DNREC website. DNREC will maintain these records on the Volkswagen (VW) Environmental Mitigation Trust Fund specific webpage. The webpage is designed to support public access and limit burden for the general public. The webpage can currently be found at <https://dnrec.alpha.delaware.gov/air/mobile-sources/vw-mitigation-plan/>.

DNREC also created an electronic listserv. The Listserv is open to the public, used to communicate news, events, and information related the Environmental Mitigation Trust Fund. The listserv is advertised through the website and at public events related to the Volkswagen Environmental Mitigation Fund.

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

The Delaware Department of Natural Resources and Environmental Control sent emails to the representatives from the U.S. Department of the Interior and the U.S. Department of Agriculture listed in subparagraph 4.2.8 of the State Trust Agreement on February 19, 2018.

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

The State of Delaware has been designated by the U.S. Environmental Protection Agency (EPA) as non-attainment for ozone (2008 and 2015 standards) in New Castle County and Sussex (2008 standards). Delaware's New Castle County has also been re-designated as attaining the fine particulate matter standard for both 1997 and 2006. New Castle County has a 10-yr maintenance plan in place.

The Department has recommended that Volkswagen Environmental Mitigation Funds under Phase 4 be used to replace 6 diesel forklifts with cleaner electric forklifts and associated infrastructure. DNREC's 2017 Emissions Inventory has concluded that up to 38% of in-state NOx emissions can be attributed to the transportation sector. Delaware's emissions from heavy and medium duty vehicles are becoming an increasingly larger source of overall mobile source emissions for nitrogen oxides (NOx).

Lastly, the diesel forklifts with units with electric units assist the Department in reducing emissions in Delaware's environmental justice areas. Environmental Justice is the act of equity among all races, ethnicities, income, and social classes of people and includes any census tract with a poverty level of 20% or higher and where 30% or more are considered minorities. The Department's mission relative to environmental justice ensures that no particular area receives disproportionate environmental impacts due to air pollution.

If applicable, describe how the mitigation action will mitigate the impacts of NO<sub>x</sub> emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

Please see Summary Attachment

**ATTACHMENTS**  
**(CHECK BOX IF ATTACHED)**

- |                                     |                     |   |
|-------------------------------------|---------------------|---|
| <input checked="" type="checkbox"/> | <b>Attachment A</b> | <b>Funding Request and Direction.</b>   |
| <input checked="" type="checkbox"/> | <b>Attachment B</b> | <b>Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).</b>   |
| <input checked="" type="checkbox"/> | <b>Attachment C</b> | <b>Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11).</b>   |
| <input checked="" type="checkbox"/> | <b>Attachment D</b> | <b>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.]</b> |
| <input type="checkbox"/>            | <b>Attachment E</b> | <b>DERA Option (5.2.12). [Attach only if using DERA option.]</b>  |
| <input type="checkbox"/>            | <b>Attachment F</b> | <b>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.]</b> |

**CERTIFICATIONS**

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

1. This application is submitted on behalf of Beneficiary Delaware, 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:** 08/08/23



**[NAME]** Lisa Borin Ogden

**[TITLE]** Deputy Secretary

Department of Natural Resources and Environmental Control

**[LEAD AGENCY]**

**for**

**State of Delaware**

**[BENEFICIARY]**

**ATTACHMENT B**

**Eligible Mitigation Action Management Plan Including Detailed Budget and  
Implementation and Expenditures Timeline**

**Project management Plan/ Project Schedule and Milestones**

Milestone	Date
Solicitation of Phase 4 Project Partner	Q1 2021
Grubb Lumber Project selected for Phase 4	Q3 2022
DNREC/Grubb Lumber contract signed for Phase 4	Q1 2023
Grubb Lumber orders new forklifts & installs electric infrastructure	Q1 2023
Trustee Receives Funding Request - Funding Approved/Issued to DNREC	Q3 2023
DNREC makes reimbursements	Q3 2023

**Project Budget**

Budget Category	Federal DERA Grant Funds	Share of Total Budget Funded by the Trust	Cost Share (Paid by Project Partner)	Sub-Total
VW Phase 4 (6 electric forklifts w/infrastructure) Grubb Lumber Forklift Replacements	\$0.00	\$210,379.95	\$257,131.05	\$467,511.00
Project Totals	<b>\$0</b>	<b>\$210,379.95</b>	<b>\$257,131.05</b>	<b>\$467,511.00</b>
Cost Share Percentage	-	45%	55%	

**PROJECTED TRUST ALLOCATIONS**

	<b>2023</b>
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$210,375.95
2. Anticipated Annual Cost Share	\$257,131.05
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$467,511.00
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 (line 1)	\$210,375.95
6. Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$210,375.95
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$4,079,290.63
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 7 minus line 6)	\$3,868,914.68



## ATTACHMENT C

### **Detailed Plan For Reporting On Eligible Mitigation Action Implementation**

The Delaware Department of Natural Resources and Environmental Control (DNREC) will provide detailed reporting on Volkswagen Phase-4 Forklift Replacements in the following ways:

- Timely updates to DNREC Volkswagen (VW) Environmental Mitigation Plan webpage;
- Delaware's semiannual reporting obligations to Wilmington Trust (the "Trustee"); and
- Quarterly reports submitted to the Environmental Protection Agency (EPA).

DNREC maintains a Volkswagen (VW) Environmental Mitigation specific webpage that has been designed to support public access and limit burden for the general public. DNREC's VW specific webpage can be found at <https://dnrec.alpha.delaware.gov/air/mobile-sources/vw-mitigation-plan/>. Timely updates to the webpage will inform the general public on the each project's status.

DNREC shall, in the next semiannual report following the Trustee's approval of this project, describe the progress implementing this Eligible Mitigation Action that will include a summary of all costs expended on the Eligible Mitigation Action through the reporting date per 5.3 of the Environmental Mitigation Trust Agreement for State Beneficiaries. The report will also include a complete description of the status, development, implementation (including project schedule and milestone updates), and any modification to this Eligible Mitigation Action.

DNREC will submit timely reports to the EPA. They will also be included in the semiannual reports that DNREC provides to the Trustee.

## **ATTACHMENT D**

### **Detailed Cost Estimates From Selected or Potential Vendors For Each Proposed Expenditure Exceeding \$25,000.**

The Delaware Department of Natural Resources and Environmental Control (DNREC) has provided detailed cost estimates from the Grubb Lumber. The Department has included a copy of NAT220002-Grubb Lumber Replacement Project application which includes copies of costs for the forklift replacements.

To: Grubb Lumber Co  
200 A St  
Wilmington, DE 19801-5221  
Attn: Mr. Jeff Haggerty

Date: March 7, 2022  
Our Ref: 41115456  
Phone: 302-652-2800  
Fax:

We respectfully submit this quotation for the following NEW Toyota 4-Wheel Sit-Down AC Electric Lift Truck (1 each):

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***Toyota...Proud to be the world's #1 forklift manufacturer!***

**TOYOTA MODEL 05-8FBM45T**, Electric Lift Truck, quality engineered with the following specification:

- Treaded Solid Pneumatic Tires, Quick Heel Type
- Electric Battery Powered

**SAFETY**

- **Toyota's exclusive System of Active Stability (SAS)**
  - Active control rear stabilizer
  - Active Mast Control (AMC) function
- **Operator Presence Sensing System (OPSS)**

**PERFORMANCE**

- **AC drive system**
- **AC hydraulic system**
- **Power select functions (S.P.H)**
- **Three forms of energy regeneration**
  - Coast control
  - Plug braking
  - Foot braking
- **Wet-Disc Brakes**

**OPERABILITY AND ERGONOMICS**

- **Electric power steering**
- **Dual operator assist grips**
- **Automatic parking brake**
- **Automatic fork leveling control**
- **Seat-mounted mini-lever controls**
- **Full floating driver compartment**

**SERVICEABILITY**

- **AC drive motor (no brushes)**
- **AC hydraulic motor (no brushes)**
- **Bolt-on overhead guard**
- **Easy access controllers**
- **Easy access no-tools floorboard**



*Photo may portray optional equipment not included in your quotation.*

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**Mast** 2-Stage (V) mast with limited free lift provides excellent visibility to load and fork tips, while providing smooth, quiet and consistent operation. Mast specifications:  
Maximum Fork Height - 179"  
Overall Lowered Height - 123.2" (Overhead Guard Height - 92.90)  
Free Lift - 3.1" with standard Load Backrest

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**Lifting Capacity**    **Base Model Capacity - 9,000 lbs. @ 24" load center**  
**Actual Capacity, based on quoted specifications, - 9,000 lbs. @24" load center to 179" MFH**

*Actual capacity ratings stated above are based on standard features, options, and attachments available through Toyota at the time of quoting. Non-standard features, options, and attachments may affect actual capacity ratings. Please contact your Toyota sales representative for additional information.*

**Tilt**                    5 degrees forward and 6 degrees backwards

**Carriage**            Wide Carriage Class III - 58"

**Load Backrest**    48" High Load Backrest

**Attachments**      **A410 WITH CASCADE SIDE SHIFTER**

**Speeds**              Travel Speed: 11 mph    Lift Speed: 98 fpm

**Voltage**              80 Volt Electrical System

**Steering**             Hydrostatic (On Demand) Power Steering

**Battery  
Compartment**        39.3" (L) x 40.5" (W) x 30.9" (H)

**Wheels and  
Tires**                  Front Tires:            250 - 15  
Rear Tires:            23 x 9 - 10

**Additional  
Equipment**            **Less Forks**  
**Mast shipped separately**  
**No Z12V Selected**  
**Weather Protection Package**  
**E45A-Seat Mount Hyd Minilever**  
**Automatic Parking Brake**  
**L09B-Multifunction Display**  
**ZLOC-Seatbelt Interlock**  
**REMOVE Steel Cab**  
**LED Headlights**  
**LED Double Rear Working Light**  
**Back Up Buzzer**  
**G40E-Fully Adjust Seat, Vinyl**  
**Orange Seat Belt**  
**Strobe Light on the Overhead Guard**  
**Solid Pneumatic Front Tires (Continental)**  
**Solid Pneumatic Rear Tires (Continental)**  
**80 Volt Industrial Battery**  
**80 Volt Opportunity Charger**  
**48" FTP Lumber Forks**

**Other  
Outstanding  
Toyota Features**      • Auto Shut-Off  
• Solid Pneumatic-style Tires  
• Full Suspension Seat  
• Travel Power Control (Programmable)  
• Adjustable Headlights with Guards  
• Memory Tilt Steering Column  
• Durable Rubber Floor Mat  
• Digital Multifunction Display

*Some standard items listed within this quotation may be replaced or altered due to optional equipment.*

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**Warranty** 12 Months or 2,000 hours whichever occurs first: Basic  
36 Months or 6,000 hours whichever occurs first: Powertrain

Warranty coverage for non-standard option components will be covered by the manufacturer of that component and not covered under the Toyota forklift standard or powertrain warranty.

*We offer a Toyota factory authorized warranty on all new Toyota Material Handling Equipment.*



\*Not applicable to all models. See here for more details: [www.ToyotaForklift.com/360-support](http://www.ToyotaForklift.com/360-support)

<b>Investment</b>	Price-Toyota Model 05-8FBM45T as specified above:	\$75,806	Each
	Net Price:	\$75,806	Each

**Terms and Conditions**

Payment: Net 10 days / Cash or Financed  
Delivery: Will advise at time of order.  
Lease payments shown are only an estimate and based on the current interest rate.  
Actual payment will reflect the interest rate at the time of delivery.  
F.O.B.: Delivered  
Prices are exclusive of any sales or use taxes now in force or which may be made effective in the future by any federal, state, or local governments.  
Lease offerings subject to credit approval.  
Lease payments shown are only an estimate and based on the current interest rate.  
Actual payment will reflect the interest rate at the time of delivery.  
Performance and specifications stated are based on specific testing and operating conditions.  
Actual performance and specifications may vary based on application, option configuration, operating conditions, and environmental factors.  
Conditions subject to change to those in effect at time of delivery.  
Your signature on this proposal constitutes an order.  
Please contact your Toyota sales representative for additional information.

Sincerely,  
Toyotalift Northeast, LLC

Accepted:  
Grubb Lumber Co

Cash Price           \$ \_\_\_\_\_  
Financed Payment   \$ \_\_\_\_\_   *Per Month* \_\_\_\_\_ *Months*

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: Breck Lehman

Name: \_\_\_\_\_

Title: Sales Representative

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Purchase Order Number or Signature (required): \_\_\_\_\_

Providing a purchase order and/or the signing of this quote constitutes a legally-binding contract to purchase any/all equipment noted on this form from ToyotaLift Northeast, LLC. (TLNE). If a purchase order system is not utilized by the company then the buyer's printed first and last name will serve as the purchase order. Given the highly-specific nature of material handling equipment, any cancellations/changes to the order will be subject to a twenty-five percent (25%) restocking/order-change fee. Any changes to previously-placed orders require documented consent of both parties.

10-day credit terms available with approved credit and accompanying Purchase Order indicating Net 10.

Maintenance programs designed around your individual application. Whether a PM agreement, Full Maintenance Program, or something in between, we have the solutions that you are looking for.

Safety Training: OSHA mandates that all forklift operators be certified for use of powered industrial equipment. Please contact TLNE to discuss a Safety Training Program to meet your company's needs.

**Optional Equipment**  
**(not included in this Quotation)**

<u>Item</u>	<u>Price</u>	<u>Accepted*</u>
1. Toyota 360 Support Plus 3 36 Months/6,000 Hrs Carriage to Counterweight Warranty 60 Months/6,000 Hrs Major Parts and Component Warranty Up to First (4) PM's Included (Parts and Labor)	\$599	_____
2. Toyota 360 Support Plus 4 48 Months/8,000 Hrs Carriage to Counterweight Warranty 60 Months/8,000 Hrs Major Parts and Component Warranty Up to First (4) PM's Included (Parts and Labor)	\$799	_____
3. Toyota 360 Support Plus 5 60 Months/10,000 Hrs Carriage to Counterweight Warranty 60 Months/10,000 Hrs Major Parts and Component Warranty Up to First (4) PM's Included (Parts and Labor)	\$999	_____

*\* Customer: please signify acceptance of an option by initialing in the space provided.*



## APPENDIX B1

### The Volkswagen Environmental Mitigation Trust Program

#### APPLICATION FORM

**Project Title:**

Replace 6 diesel forklifts with 6 electric forklifts

**General Information:**

Applicant: Grubb Lumber Company, Inc.			
Mailing Address: P.O. Box 627			
City: Wilmington	State: DE	Zip: 19899	County: USA
Daytime Phone: 302-652-2800		Alternate Phone: 610-256-4330	
Email: azentz@grubblumber.com			
Equipment Owner (if different from Applicant):			
Mailing Address:			
City:	State:	Zip:	County:
Daytime Phone:		Alternate Phone:	
Email:			

The following table lists **eligible mitigation actions** pursuant to the Environmental Mitigation Trust. Please select the eligible mitigation action(s) for which you are applying (Check all that apply).

Project Title: Replace 6 diesel forklifts with 6 electric forklifts	
Type of Mitigation Action: Vehicle Replacement: <input checked="" type="checkbox"/> Engine Repower: <input type="checkbox"/>	
Type of Entity: Government: <input type="checkbox"/> Non-government: <input checked="" type="checkbox"/>	
Quantity	Vehicle Replacement: <u>6</u> Engine Repower: _____
Check all that apply	<b>Eligible Mitigation Actions</b>
<input type="checkbox"/>	<b>Class 8 Local Freight Trucks and Port Drayage Trucks</b> (engine model year 2009-1992) repowered with any new diesel or alternate fueled engine or all-electric engine, or replaced with any new diesel or alternate fueled or all-electric vehicle, with the engine model year in which the eligible large trucks mitigation action occurs or newer.
<input type="checkbox"/>	<b>Class 4-8 school buses, shuttle buses, or transit buses</b> (engine model year 2009 to 1992) repowered with any new diesel or alternate fueled or all-electric engine, or replaced with any new diesel or all-electric vehicle, with the engine model year in which the eligible bus mitigation action occurs or newer.
<input type="checkbox"/>	<b>Freight switchers</b> that operate 1000 or more hours per year repowered with any new diesel or alternate fueled or all-electric freight switcher certified to meet the applicable EPA emissions.
<input type="checkbox"/>	<b>Ferries/Tugs</b> - Unregulated, Tier 1 or Tier 2 marine engines repowered with Tier 3, Tier 4, alternate fueled, or all-electric engine, or upgraded with an EPA certified remanufacture system or an EPA verified engine upgrade.
<input type="checkbox"/>	<b>Ocean Going Vessels</b> - Marine shore power systems or components of such systems that enable a compatible vessel's main and auxiliary engines to remain off while the vessel is at berth.
<input type="checkbox"/>	<b>Class 4-7 local freight trucks</b> (engine model year 1992-2009) repowered with a new diesel, alternate fueled or all-electric engine, or replaced with any new diesel, alternate fueled or all-electric vehicle, with the engine model year in which the eligible medium trucks mitigation action occurs.
<input type="checkbox"/>	<b>Airport Ground Support Equipment</b> - (Tier 0, Tier 1, or Tier 2 diesel powered) uncertified or certified to 3 g/bhp-hr. or higher emissions spark ignition engine powered airport ground support equipment repowered with an all-electric engine, or replaced with the same airport ground support equipment or newer in an all-electric form.
<input checked="" type="checkbox"/>	<b>Forklifts and Port Cargo Handling Equipment</b> - Forklifts with greater than 8000 pounds (lbs.) of lift capacity and port cargo handling equipment repowered with an all-electric engine, or replaced with the same equipment or newer in an all-electric form.

## Mitigation Action Description

Please provide a brief narrative describing how the project relates to Delaware's VW Environmental Mitigation Plan by reducing NOx emissions and how this project will benefit the State of Delaware. If additional space is needed please label (no more than one page) in your application "Title of Project, Mitigation Action Description."

Grubb Lumber is prepared to replace six lumber yard forklifts that run 8-10 hrs per day each on diesel with six all electric forklifts. This will also include running the electric needed to charge the forklifts. The company's operations are located in Wilmington, Delaware and across the street from multi-family houses, a large apartment building and an area that is currently being developed. Having forklifts that emit no toxic fumes and are quiet will be a win for to company and local community.

### Estimated NOx Reductions

Please describe and calculate the NOx reductions achieved for this project using the Diesel Emission Quantifier (DEQ) on the EPA website. Estimate the NOx emission reductions from the project in terms of dollar per ton of NOx using the DEQ found at <https://www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq>. Attach a separate summary calculation worksheet generated by the DEQ for each vehicle or piece of equipment and label pages in your application "Title of Project, Estimated NOx Reductions."

Please identify the Inputs entered into the DEQ for Vehicles and/or Equipment proposed for replacement or repower under this application. Copy this form if more space is needed.

Diesel Emission Quantifier (DEQ) Inputs	Vehicles & equipment proposed for replacement or repower (Leave fields blank that do not apply)			
	Forklift	Forklift	Forklift	Forklift
Vehicle or Engine Group				
VIN				
Engine Serial Number	P445D-0724-9913KF	P445D-0727-9913KF	P445D-0728-9913KF	P445D-0729-9913KF
Propulsion Engine (marine)				
Total Auxiliary Engines (Marine)				
Vehicle Make				
Vehicle Model				
Vehicle Model Year				
Engine Make	Clark	Clark	Clark	Clark
Engine Model	C45D	C45D	C45D	C45D
Engine Model Year	2017	2017	2017	2017
Engine Cylinder Displacement				
Number of Engine Cylinders				
Retrofit Year				
Engine Tier				
Engine Horsepower				
Annual Fuel Used (gal/yr)	1960	1960	1960	1960
Annual Usage Rate (hrs)	1750	1750	1750	1750
Annual Miles				
Annual Idling Hours				
Fuel Type	Diesel	Diesel	Diesel	Diesel
Remaining Life	5-10yrs	5-10yrs	5-10yrs	5-10yrs
Normal Attrition Year				
Proposed Fuel Type				
Technology Cost				

### Estimated NOx Reductions

Please describe and calculate the NOx reductions achieved for this project using the Diesel Emission Quantifier (DEQ) on the EPA website. Estimate the NOx emission reductions from the project in terms of dollar per ton of NOx using the DEQ found at <https://www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq>. Attach a separate summary calculation worksheet generated by the DEQ for each vehicle or piece of equipment and label pages in your application "Title of Project, Estimated NOx Reductions."

Please identify the Inputs entered into the DEQ for Vehicles and/or Equipment proposed for replacement or repower under this application. Copy this form if more space is needed.

Diesel Emission Quantifier (DEQ) Inputs	Vehicles & equipment proposed for replacement or repower (Leave fields blank that do not apply)			
Vehicle or Engine Group	Forklift	Forklift		
VIN				
Engine Serial Number	P445D-0730-9913KF	P445D-0731-9913KF		
Propulsion Engine (marine)				
Total Auxiliary Engines (Marine)				
Vehicle Make				
Vehicle Model				
Vehicle Model Year				
Engine Make	Clark	Clark		
Engine Model	C45D	C45D		
Engine Model Year	2017	2017		
Engine Cylinder Displacement				
Number of Engine Cylinders				
Retrofit Year				
Engine Tier				
Engine Horsepower				
Annual Fuel Used (gal/yr)	1960	1960		
Annual Usage Rate (hrs)	1750	1750		
Annual Miles				
Annual Idling Hours				
Fuel Type	Diesel	Diesel		
Remaining Life	5-10yrs	5-10yrs		
Normal Attrition Year				
Proposed Fuel Type				
Technology Cost				

**Project Budget**

All projects require a cost share. Please be as detailed as possible when completing your budget. The applicant is responsible for detailing the proposed budget associated with the project. This includes “eligible mitigation actions” which includes the equipment necessary for the project while the “ineligible mitigation action expenditures” includes all administrative expenses related to the project.

Eligible Mitigation Actions are those projects that qualify for funding under this RFP. See Section 6 “Eligible Mitigation Actions” in the RFP for additional information. Copy this form if more space is needed.

Eligible Mitigation Actions					
Eligible Item	Make and Model	VIN or Serial Number	Number of Each Item	Cost per Item	Estimated Costs
FORKLIFT	TOYOTA	05-8FBM45T	6	75,806.00	454,836.00
ELECTRICAL INFRASTRUCTURE					12,675.00
EYE WASH STATION			1	417.94	417.94
Total Eligible Mitigation Action Costs					\$ 467,928.94

Ineligible Mitigation Action Expenditures are those administrative expenses that do not qualify for funding under this announcement. See Section 8 “Ineligible Mitigation Action Expenditures” under this RFP for additional information. If additional space is needed please label pages in your application “Title of Project, Proposed Budget”

Ineligible Mitigation Action Expenditures				
Ineligible Item	Description	Number of Each Item	Cost per Item	Estimated Costs
Old Forklift	Purchase of 6 Clark forklifts of lease	6	18,763.00	112,578.00
Total Ineligible Mitigation Action Expenditures (no match requirement)				\$ 112,578.00

Total Budget Summary	
Total Eligible Mitigation Actions (from above)	\$ 467,928.94
Total Ineligible Projects Mitigation Action Expenditures (from above)	\$ 112,578.00
Total Costs	\$ 582,414.00
Cost Share Percentage (See Section 7 “Cost Share” of the RFP)	% 45.00
Total Cost share required from VW Mitigation Funds (matching funds)	\$ 210,568.02
Are you willing to accept funds from the DERA grant? If no, please explain below.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## Proposed Project Location

Define the project area. Please note the following:

1. if the project is sited near a major highway or transportation corridor, shipping route, or near a shipping logistics center,
2. is the project in an environmental justice (EJ) area or related location that receives a disparate proportion of environmental impacts,
3. if the project avoids environmentally sensitive areas or areas containing critical habitats.

Indicate if the proposed project is located in a non-attainment and air quality maintenance areas. If additional space is needed please label page (no more than one) in your application "Title of Project, Proposed Project Location.

The project is located in South Wilmington, DE. The lumber yard is about a half mile from Interstate 95 and about a mile from Interstate 495. The yard is across the street from high density housing and about 1/8 of a mile from the Christiana River. Per EPA map we are in th 90-95 percentile for traffic, 35.5-52 percentile for Poverty Level; 572-1,082 percentile for People of Color Population.

## Project Timeline

All projects must be completed within one (1) year of signing a final contract or MOU. The milestones included in this template are provided as guidance. Applicants may substitute other milestones that suit their purpose, please be as detailed as possible.

Project Timeline	
Milestone	Estimated Date
Project Equipment Purchase Made	June 2022
Equipment Delivery	May 2023
Equipment Installation (if applicable)	May 2023
Submit Proof of Scrapping of Replaced Vehicle or Engine (pictures) and Certificate of Destruction, Bill of Sale, and an Invoice to the Department	June 2023

### **Ability to be Replicated throughout the State**

Provide a brief narrative to explain how the proposed project has the ability to be replicated throughout the state with other fleets or for public access. If additional space is needed please label (no more than one page) in your application "Title of Project, Replication."

We own a fleet of trucks that operate throughout the state delivering lumber and other building materials. We turn over the trucks at after 10 yrs of usage. Right now the technology is not there to transition the fleet to electric but we are hoping when the trucks come up for replacement in the future that the technology to transition to electric is there and we will also be looking to move our fleet to electric when feasible.

### **Collaboration with Other Entities in the State**

Provide a brief narrative to demonstrate that the project includes collaborative efforts between the applicant and project team. If additional space is needed please label the narrative (no more than one page) in your application "Title of Project, Collaboration."

We only have this one location.

### **Economic Development**

Provide a brief narrative to explain how the project creates and/or retains local jobs for Delawareans and serves as an economic development engine for local Delaware based companies. If additional space is needed label the narrative (no more than one page) in your application "Title of Project, Economic Development."

We are located in Wilmington and many of our employees live near by. By receiving the Grant we will save significant money for fuel and maintenance and be able to reinvest the savings into our workforce and infrastructure. The electrical infrastructure is being performed by a local contractor as well.



**Certification**

*The Applicant certifies that they have been authorized by the Equipment Owner to submit this application. The Equipment Owner agrees to comply with all requirements of Delaware's Volkswagen Environmental Mitigation Plan and that the information provided is true, accurate, and complete.*

Applicant's Signature: \_\_\_\_\_



Date: 3/18/22

Equipment Owner's Signature: \_\_\_\_\_  
(If different from Applicant)

Date: \_\_\_\_\_

## Emission Results and Health Benefits for Project: Forklift Replacement

### Emission Results

Here are the combined results for all groups and upgrades entered for your project.<sup>1</sup>

#### Annual Results

<u>(short tons)<sup>2</sup></u>	NO <sub>x</sub>	PM2.5	HC	CO	CO <sub>2</sub>	Fuel <sup>3</sup>
Baseline for Upgraded Vehicles/Engines	1.130	0.001	0.009	0.032	132.3	11,760
Amount Reduced After Upgrades	1.130	0.001	0.009	0.032	132.3	11,760
Percent Reduced After Upgrades	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

#### Lifetime Results (short tons)<sup>2</sup>

Baseline for Upgraded Vehicles/Engines	5.649	0.004	0.047	0.160	661.5	58,800
Amount Reduced After Upgrades	5.649	0.004	0.047	0.160	661.5	58,800
Percent Reduced After Upgrades	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

#### Lifetime Cost Effectiveness (\$/short ton reduced)

<b>Capital Cost Effectiveness<sup>4</sup></b> (unit & labor costs only)	\$80,851	\$126,512,651	\$9,778,348	\$2,855,423	\$690	
<b>Total Cost Effectiveness<sup>4</sup></b> (includes all project costs)	\$105,059	\$164,392,266	\$12,706,119	\$3,710,375	\$897	

<sup>1</sup> Emissions from the electrical grid are not included in the results.

<sup>2</sup> 1 short ton = 2000 lbs.

<sup>3</sup> In gallons; fuels other than ULSD have been converted to ULSD-equivalent gallons.

<sup>4</sup> Cost effectiveness estimates include only the costs which you have entered.

# Remaining Life

**Clark Forklifts:** Industrial | Forklift  
Vehicle Replacement - All-Electric

5 years

LAST UPDATED ON MARCH 07, 2022



200 Schell Lane  
Suite 200  
Phoenixville, PA 19460  
(610)337-8300

Invoice

CUST # 4151

DATE 10/4/2022

SOLD TO Grubb Lumber Co, Inc.  
200 A. Street  
Wilmington, DE 19801

INVOICE # 01CS064916


SHIP TO Grubb Lumber Co, Inc.  
200 A. Street  
Wilmington, DE 19801

PO# Signed Quote

ATTN: Jeff Haggerty

TERMS : COD

MAKE	MODEL	S/N	CONTROL #	QTY	AMOUNT
CLARK	C45D	P455D-0724-9913KF	4153-29	1	\$18,763.00
CLARK	C45D	P455D-0727-9913KF	4153-30	1	\$18,763.00
CLARK	C45D	P455D-0728-9913KF	4153-31	1	\$18,763.00
CLARK	C45D	P455D-0729-9913KF	4153-32	1	\$18,763.00
CLARK	C45D	P455D-0730-9913KF	4153-33	1	\$18,763.00
CLARK	C45D	P455D-0731-9913KF	4153-33	1	\$18,763.00



Trade-In *By: Vicki Dyer*  
*Date: 10/3/2022*

Remit  
Payment to : Toyotalift Northeast, LLC  
PO Box 21996  
New York, NY 10087-1996

Sales Tax

TOTAL DUE

**\$112,578.00**

**ENVIRONMENTAL MITIGATION PLAN ATTACHMENT**

A Copy of Delaware's Environmental Mitigation Plan is attached.



DELAWARE DEPARTMENT OF  
**NATURAL RESOURCES AND  
ENVIRONMENTAL CONTROL**

## **Volkswagen Environmental Mitigation Plan**

**December 2018  
As amended on  
February 2020  
June 2021**

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## I. BACKGROUND

On October 18, 2016, an initial Partial Consent Decree was finalized between the U.S. Justice Department, the Volkswagen (VW) Corporation, and its subsidiaries regarding the installation and use of emissions testing defeat devices in approximately 590,000 2.0 and 3.0 liter engine vehicles sold and operated in the United States beginning with model 2009 through 2014. A second partial settlement was approved for the 3.0 liter engine class of vehicles on May 17, 2017. Use of these defeat devices has increased air emissions of nitrogen oxide (NOx), resulting in adverse impacts to air quality and violating the federal Clean Air Act. NOx emissions contribute to the formation of ground-level ozone, which impairs lung function and cardiovascular health.

The Environmental Mitigation Trust Agreement for State Beneficiaries (Trust) dated October 2, 2017 has been established as part of the Partial Consent Decrees. Funds are to be used for environmental mitigation projects that reduce emissions of nitrogen oxides (“NOx”) where the Subject Vehicles were, are, or will be operated. The Trust Agreement is intended to fully mitigate the total, lifetime excess NOx emissions from the Subject Vehicles where the Subject Vehicles were, are, or will be operated.

The State of Delaware has been allocated approximately \$9.6 million from the Environmental Mitigation Trust based on the number of affected vehicles in Delaware. Delaware applied for Beneficiary status on November 27, 2017 and officially became eligible to receive funds on January 29, 2018. Wilmington Trust, as the court appointed Trustee, holds all funds and will disburse the funds upon receiving a state submitted work plan and budget. The Trust establishes a process to administer and receive the funds, including the development of a mitigation plan, and the types of mitigation projects eligible for funding<sup>1</sup>.

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<sup>1</sup> Appendix D of the Partial Consent Decree MDL No. 2672 CRB (JSC)



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In addition to projects that reduce NO<sub>x</sub> emissions, under the partial consent decree, states may allocate up to 15% of the funds towards zero emission vehicle fueling and charging infrastructure (i.e. Hydrogen fueling and electric vehicle charging stations).

## **II. OVERVIEW, OBJECTIVES AND FUNDING PRIORITIES**

On behalf of the State of Delaware, the Department of Natural Resources & Environmental Control (DNREC) has developed this Proposed Environmental Mitigation Plan to provide the public with insight into the state's vision and overall approach to use the mitigation trust funds. The primary goal of the State of Delaware's mitigation plan is to improve and protect ambient air quality by implementing eligible mitigation projects that will achieve significant and sustained reductions in NO<sub>x</sub> emission exposures in the following:

- Areas with poor air quality;
- Areas with historical air quality issues; and
- Areas that receive a disproportionate quantity of air pollution from diesel vehicles.

In accordance with Appendix D of the Partial Consent Decree,<sup>2</sup> this Proposed Environmental Mitigation Plan specifically describes:

- The funding priorities established to guide the planning, solicitation, and project selection processes,

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<sup>2</sup> Section 4.1 Beneficiary Mitigation Plan, Appendix D of the Partial Consent Decree MDL No. 2672 CRB (JSC).

- 
- The categories of eligible mitigation projects anticipated to be appropriate to achieve the stated goals and the assessment of the allocation of funds anticipated to be used for each type of eligible mitigation project,
  - How the state may consider the potential beneficial impact of the selected eligible mitigation projects on air quality in areas that historically bear a disproportionate share of the air pollution burden, and
  - The anticipated ranges of emission benefits that would be realized by implementation of the eligible mitigation projects identified in the Environmental Mitigation Plan.

In addition to the above listed Environmental Mitigation Plan components, DNREC will seek and consider public comments on the State of Delaware's Proposed Environmental Mitigation Plan, which will be included in the final plan as required by the Consent Decree<sup>3</sup>.

The State of Delaware has the discretion to adjust its objectives and specific spending plan when necessary to achieve the plan's goal; for that reason, this plan is a living document. The State of Delaware will provide updates of the mitigation plan to the Trustee and on DNREC's public webpage about Delaware's actions for meeting the requirements of the Partial Consent Decree and the Mitigation Trust, at:

<http://www.dnrec.delaware.gov/air/Pages/VWMitigationPlan.aspx>

This Proposed Environmental Mitigation Plan is not a solicitation for projects. As such, this plan does not include details on the competitive application.

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<sup>3</sup> <https://www.epa.gov/enforcement/third-partial-and-30l-second-partial-and-20l-partial-and-amended-consent-decree>

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### III. PHASED FUNDING APPROACH AND ELIGIBLE APPLICANTS

DNREC is proposing a phased-in plan for the State of Delaware's allocation of funding. A phased plan will allow the state to:

- Build transparency and involve the public in reviewing and revising the plan between phases;
- Learn which projects work best, and modify requests for proposals in subsequent phases to focus on the most effective projects;
- Allow the state to identify environmental justice areas; and
- Allow the state to adjust priorities and investments based on the newest and most up-to-date vehicle technology.

The first phase of funding will be the first step in achieving our goals for the program. The phases of funding are:

- **Phase 1: \$3,225,560.99 (2018-2023)** – DNREC proposes to replace old diesel school buses with new cleaner school buses over a five year period.
- **Phase 2: \$361,374.75 (2019-2020)** – DNREC offered a competitive RFP for projects in all categories. Two projects were determined by eligibility criteria set forth in the plan. These projects are described in Phase 2.
- **Phase 3: \$2,234,590 (2020-2021)** – DNREC will allocate 15% of the funds for electric vehicle supply equipment. Projects will consist of the replacement of five (5) government-owned dump trucks and a competitive RFP where applications will be accepted for projects in all categories as well as school bus replacements

with private transportations providers. Projects will be determined by the eligibility criteria set forth in the plan.

- **Phase 4: Up to \$3.8 million (2022-2023)** – Projects will consist of a competitive RFP where applications will be accepted for projects in all categories as well as school bus replacements with private transportations providers. Projects will be determined by the eligibility criteria set forth in the plan.

Delaware’s allocation of Trust funds is \$9,676,682.97 (0.33% of the total \$2.9 billion in Trust funds made available to states and Tribes). DNREC has proposed that Trust funds will be requested and made available for mitigation projects. A detailed project timeline can be found in **Table 1**.

**Table 1 - Tentative Timeline of Events**

Event	Time Frame
Court approves the partial settlement	October 25, 2016
Court Approves Trustee	March 15, 2017
Court Approves Trust	October 2, 2017
Delaware files Beneficiary Certification Application	November 27, 2017
Trustee Certifies Delaware as a Beneficiary	January 29, 2018
Public Comment on the draft Mitigation Plan	March 28, 2018
Delaware finalizes preliminary Mitigation Plan	December 2018
Delaware initiates Phase 1 – year 1 projects	Quarter 4 2018
Delaware releases RFP – Phase 2	January 28, 2019
Delaware selects Phase 2 projects	Quarter 3 2019
Delaware finalizes Phase 1 – year 1 projects	Quarter 4 2019
Public Comment opens on Draft Phase 3 Plan	December 2019
Delaware initiates Phase 1 – year 2 projects	Quarter 1 2020
Delaware initiates Phase 2 projects	Quarter 1 2020
Delaware releases an RFP on Phase 3 projects.	Quarter 1 2020
Delaware selects Phase 3 projects	Quarter 3 2020
Delaware finalizes Phase 1 – year 2 projects	Quarter 4 2020
Delaware finalizes Phase 2 projects	Quarter 4 2020*
Delaware initiates Phase 1 – year 3 projects	Quarter 1 2020*
Delaware initiates Phase 3 projects	Quarter 1 2020*
Delaware finalizes Phase 1 – year 3 projects	Quarter 4 2021*
Delaware finalizes Phase 3 projects	Quarter 4 2021*
Delaware releases an RFP on Phase 4 projects	Quarter 1 2022*
Delaware initiates Phase 1 – year 4 projects	Quarter 1 2022*
Delaware selects Phase 3 projects	Quarter 3 2022*
Delaware finalizes Phase 1 – year 4 projects	Quarter 4 2022*

Event	Time Frame
Delaware initiates Phase 4 projects	Quarter 1 2023*
Delaware finalizes Phase 3 projects	Quarter 4 2023*

\*Dates are estimates and are subject to change.

DNREC will maintain and make publically available all documentation submitted in the support of each funding request on the VW Settlement project website<sup>4</sup>.

## IV. SUMMARY OF PHASED SPENDING APPROACH

### Phase 1 - School Bus Replacement Program:

The Department has recommended that Phase 1 funding be used to replace diesel school buses with cleaner school buses. DNREC's 2014 Emissions Inventory has concluded that up to 72% of in-state NO<sub>x</sub> emissions can be attributed to the transportation sector. Delaware's emissions from heavy and medium duty vehicles (which include school buses) are becoming an increasingly larger source of overall mobile source emissions for nitrogen oxides (NO<sub>x</sub>), as shown in Figure 1.

Research shows NO<sub>x</sub> emissions will be reduced by 11 percent just by replacing a diesel school bus with a new propane school bus<sup>5</sup>.

<sup>4</sup>DNREC Website: <http://www.dnrec.delaware.gov/air/Pages/VWMitigationPlan.aspx>

<sup>5</sup> Propane education and Research Council - <https://www.propanecouncil.org/>

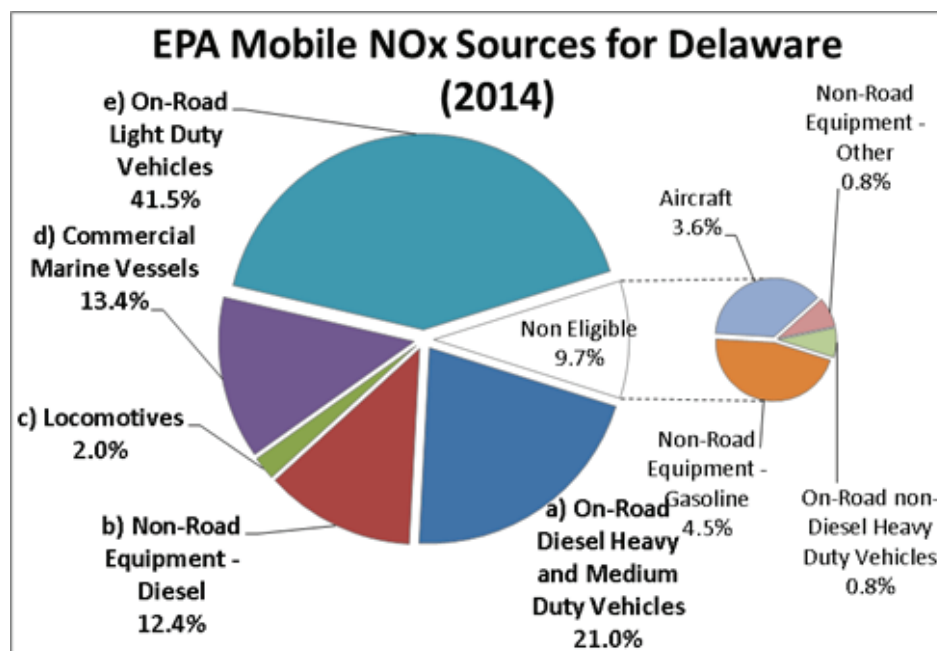


Figure 1 - Mobile NOx Sources for Delaware (Source 2014 NEI v1)

Studies have demonstrated that older, more polluting diesel school buses present significant health risks for the students who typically ride the bus. This includes the exacerbation of pre-existing pulmonary disorders such as asthma. Asthma is the most common long-term childhood disease, making newer and cleaner buses an urgent priority. Additionally, children are more susceptible to air pollution because their respiratory systems are still developing and they have faster breathing rates than do adults<sup>6</sup>.

Lastly, replacing school buses with buses that operate on cleaner burning fuel will assist the Department in reducing emissions in Delaware's environmental justice (EJ) areas. Environmental Justice is the act of equity among all races, ethnicities, income, and social classes of people and includes any census tract with a poverty level of 20% or higher and where 30% or more are considered minorities. The Department's mission relative to environmental justice ensures that no particular area receives disproportionate environmental impacts due to air pollution.

<sup>6</sup> American Lung Association – <http://www.ala.org>

## Phase 1 - Program Requirements:

In Phase 1, the Department proposes and continues to use up to 1/3 of the allocated Trust funds or \$3,225,560.99 to provide funds to the Department of Education for the replacement of school buses with cleaner burning fuel. The Department is proposing a cost share of 30% for government-owned school bus replacements.

To be eligible, each school bus being replaced must be:

- 1) Scrapped and destroyed at the time of replacement;
- 2) Owned and operated in Delaware;
- 3) Equipped with a model year 1992 to 2009 engine;
- 4) Serve a public school district or a charter school in Delaware where at least 40% of the students are disparately impacted as shown in **Table 2 and 3**;
- 5) Each new bus purchased must be of equivalent size as the bus being replaced;
- 6) The bus must be replaced with a current model year or newer; and
- 7) The replaced school bus must be fueled by propane or clean diesel.

**Table 2 - Percentage of Disparately Impacted Students by School District**

County	School District	Disparately Impacted (%)
New Castle	Appoquinimink	13.2
	Brandywine	29.8

County	Christina	<b>42.9</b>
	Colonial	39.8
	New Castle Co. Vo-Tech	27.6
	Red Clay	34.1
	Smyrna	24.9
Kent County	Caesar Rodney	30.5
	Capital	<b>48.9</b>
	Lake Forest	<b>39.4</b>
	Milford	<b>41.2</b>
	Polytech Vo-Tech	17.0
Sussex County	Cape Henlopen	29.0
	Delmar	14.2
	Indian River	36.0
	Laurel	<b>47.4</b>
	Seaford	<b>47.7</b>
	Sussex Technical	16.6
	Woodbridge	<b>41.9</b>



**Table 3 - Percentage of Disparately Impacted Students by Charter School**

<b>County</b>	<b>Charter School</b>	<b>Disparately Impacted (%)</b>
New Castle County	Academia Antonia Alonso	<b>57.3</b>
	Charter School of New Castle	<b>51.4</b>
	Delaware Academy of Public Safety and Security	39.9
	Delaware Design-Lab High School	29.9
	East Side Charter School	<b>79.3</b>
	First State Montessori Academy	11.6
	Freire Charter School	<b>48.9</b>
	Gateway Lab School	<b>42.3</b>
	Great Oaks Charter School	<b>55.8</b>
	Kuumba Academy Charter School	<b>62.2</b>
	Las Americas Aspira Academy	25.4
	MOT Charter School	5.3
	Moyer (Maurice J.) Academy	20.0
	Newark Charter School	8.0
Odyssey Charter School	14.4	
Prestige Academy	<b>73.4</b>	
Kent County	Academy of Dover	<b>67.8</b>
	Campus Community Charter School	<b>40.0</b>
	Early College High School at Delaware State University	33.1
	First State Military Academy	24.9
	Positive Outcomes Charter School	30.2
	Providence Creek Academy Charter School	18.0
Sussex County	Sussex Academy	9.0

### **Phase 2 - Competitive RFP Program:**

In phase 2 of the plan, the Department proposed to provide up to 1/3 of the allocated Trust funds or \$3,225,560.99 in 2019 for the replacement of eligible mitigation

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actions<sup>7</sup>. The Department will issue a competitive request for proposals (RFP) for projects that reduce nitrogen oxide (NOx) emissions from the transportation sector.

The following mitigation project types will be eligible for use of the VW Settlement Funds per the Trust Agreement found in Appendix D-2:

- 1.) Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)**
- 2.) Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)**
- 3.) Freight Switchers**
- 4.) Ferries/Tugs**
- 5.) Ocean Going Vessels (OGV) Shorepower**
- 6.) Class 4-7 Local Freight Trucks (Medium Trucks)**
- 7.) Airport Ground Support Equipment**
- 8.) Forklifts and Port Cargo Handling Equipment**

### **Environmental Benefits:**

The retrofit, repower, or replacement of eligible vehicles and equipment may provide a wide range of emission benefits based on many variables, including the type of vehicle or engine replaced, the initial age of the engine, and the engine power rating.

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<sup>7</sup> The Department anticipates spending \$361,674.75 in Volkswagen Environmental Mitigation Trust Funds for Phase 2. The remaining \$2.8M will rollover to Phase 3 which will provide approximately \$6.0M to spend.

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Each of the 8 project categories outlined in the VW Settlement Environmental Mitigation Plan will result in the following combined environmental benefits:

- Tons of pollution reduced or avoided over the lifetime of the zero emissions vehicle supply equipment, specifically, NO<sub>x</sub>, PM<sub>2.5</sub>, GHGs such as CO<sub>2</sub> and black carbon,
- Net reduction in gallons of diesel fuel and/or other fossil fuels used,
- Improved ambient air quality and human health in communities located in nonattainment areas, areas with historical air quality issues, or in areas that bear a disproportionate share of the air pollution burden, as well as benefits to the local economy, and the welfare of residents in such communities, and
- Reduced public exposure to diesel particulate matter, which the U.S. EPA has classified as a likely human carcinogen.

Additionally, based on current EPA exhaust emission standards for NO<sub>x</sub>:<sup>8</sup>

- Heavy duty highway vehicles may provide up to a 96% reduction in NO<sub>x</sub> emissions per vehicle, based on replacing a model year 1992 engine with a model year 2007 engine,
- Non-road equipment replacements, depending on the type of equipment and engine power rating, may provide between a 20% and 95% reduction in NO<sub>x</sub> emissions per engine,
- In locomotives, replacing the oldest (Tier 0) engine with the newest (Tier 4) engine may provide up to an 89% NO<sub>x</sub> reduction per engine,

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<sup>8</sup> EPA exhaust emission standard data retrieved from: <https://www.epa.gov/emission-standards-reference-guide>.

- In commercial marine vessels, an upgrade or repower of a ferry or tug engine may provide up to an 80% NOx reduction for each vessel, and
- Shorepower projects may reduce all NOx exhaust emissions from many ocean-going vessels.

These anticipated ranges of emission benefits were used to inform the plan's funding priorities, categories of eligible mitigation projects, and funding allocation considerations for each category of eligible mitigation projects. It is important to note that the range of emission benefits mentioned above are for individual engines and actual NOx emissions reductions will vary based on the type of projects received for funding consideration and the eligible mitigation projects ultimately funded. However, in order to achieve the goal of the state mitigation plan, it is a priority to fund sizeable projects designed to achieve the greatest emission reduction for the dollar (i.e., capital cost effectiveness in dollars/ton).

The cost shares and requirements involved for each vehicle or equipment repower or replacement will be equivalent to the terms of the Diesel Emission Reduction (DERA)<sup>9</sup> grant. Cost shares identified in **Table 4** are based on the FY2017 State Clean Diesel Program Guide<sup>10</sup>.

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<sup>9</sup> The DERA program is a Congressionally-authorized project that enables the U.S. EPA to offer assistance for actions reducing diesel emissions. Thirty percent of the annual DERA funds are allocated to the DERA Clean Diesel State Grant Program. States and territories that match the base amount dollar per dollar receive an additional amount of EPA DERA funding to add to the grant (50% of the base amount). Trust funds can be used for states or territories non-federal match on a 1:1 basis.

<sup>10</sup> 2017 FY2017 State Clean Diesel Program Guide - <https://www.epa.gov/sites/production/files/2017-02/documents/fy17-state-program-guide-2017-02.pdf>

Table 4 - Cost Shares for Eligible Mitigation Actions

Eligible Mitigation Action	Activity	Vehicle and Equipment Eligibility (Engine Model Year or Tier)	VW Funding	Cost Share Required
Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks) & Class 4-7 Local Freight Trucks (Eligible Medium Trucks)	Engine replacement with new diesel or alternate fueled engine	1992-2009	40%	60%
	Engine replacement with new all-electric engine	1992-2009	60%	40%
	Vehicle replacement with new diesel or alternate fueled vehicle	1992-2009	25% (50% for Drayage)	75% (50% for Drayage)
	Vehicle Replacement with all-electric vehicle	1992-2009	45%	55%
Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)	Engine replacement with new diesel or alternate fueled engine	2009 and older	40%	60%
	Engine replacement with new all-electric engine	2009 and older	60%	40%
	Vehicle replacement with new diesel or alternate fueled vehicle	2009 and older	25%	75%
	Vehicle Replacement with all-electric vehicle	2009 and older	45%	55%
Freight Switchers	Engine replacement with new diesel or alternate fueled engine or generator sets that are EPA certified	Pre-Tier 4	40%	60%
	Engine replacement with new all-electric engine	Pre-Tier 4	60%	40%
	Locomotive replacement with new diesel or alternate fueled freight switcher that is EPA certified	Pre-Tier 4	25%	75%
	Locomotive replacement with	Pre-Tier 4	45%	55%

Eligible Mitigation Action	Activity	Vehicle and Equipment Eligibility (Engine Model Year or Tier)	VW Funding	Cost Share Required
	new all-electric freight switcher			
Ferries/Tugs	Engine replacement with new Tier 3 or 4 diesel or alternate fueled engine	Pre-Tier 3	40%	60%
	Engine replacement with new all-electric engine	Pre-Tier 3	60%	40%
	Certified Remanufacture System or Verified Engine Upgrade	Pre-Tier 3	40%	60%
Ocean Going Vessels	Costs associated with shore-side system	n/a	25%	75%
Airport Ground Support Equipment	Engine replacement with new all-electric engine	Pre-Tier 3	60%	40%
Forklifts and Port Cargo Handling Equipment	Equipment replacement with new all-electric equipment	8000+ lbs lift capacity	45%	55%

Non-government and government entities are eligible to apply for funding to implement mitigation projects. Project funding will be awarded through a competitive process in accordance with Delaware's procurement laws<sup>11</sup>. Any unspent funds remaining at the end of Phase 2 will be rolled into a subsequent Phase.

### **Diesel Emission Reduction Act (DERA):**

The Department may leverage the projects in all phases in order to received additional Diesel Emission Reduction Act (DERA) grant funding. Any source type applying for grant funding will be subject to the requirements of the DERA State Clean

<sup>11</sup> Delaware Procurement laws can be found at <http://mymarketplace.delaware.gov/>

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Diesel Grant Program, including but not limited to general eligibility, project evaluation criteria, eligible project and administrative expenditures, cost-share, and funding restrictions.

The projects submitted via the RFP will be reviewed by a Department established Project Selection Committee. The committee will select and rank project applications based on a set “Project Scoring Criteria/Matrix” developed by the Department as shown in **Table 5** expressly for this purpose.

### **Phase 2, Phase 3, and Phase 4 Program Requirements:**

To be eligible, each vehicle or piece of equipment to be repowered or replaced must be:

- 1) Scrapped and destroyed at the time of replacement;
- 2) Owned and operated in Delaware;
- 3) Equipped with an eligible model year engine or Tier level;
- 4) Serve an environmental justice area;
- 5) Each new vehicle or engine purchased must be of appropriate /equivalent size as the vehicle or engine being replaced; and
- 6) The new vehicle must be replaced with a current model year or newer.

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## Volkswagen RFP Scoring Matrix:

The Department has developed a project RFP scoring criteria/matrix. Each application submitted will be scored based on the factors outlined in the matrix in **Table 5**. The number of projects that are selected for funding in each phase will depend on the applications received and interest by vehicle and equipment owners.

The following criteria will be used by the grant Review Committee to review and score applications received for the VW Mitigation Funds:



**Table 5 - VW Settlement RFP Award Criteria**

<b>Project Award Criteria</b>	<b>Points Possible</b>	<b>Points Awarded</b>	<b>Comments</b>
<p><b>Measurable, verifiable reduction in NOx emissions</b></p> <ul style="list-style-type: none"> <li>- The project will produce a net reduction in NOx emissions in the State and result in a measurable, verifiable reduction in NOx per ton of emissions using the Diesel Emission Quantifier.</li> <li>- Projects must meet eligibility requirements of Appendix D-2 of the VW Mitigation Plan</li> </ul>	30		
<p><b>Project Budget</b></p> <ul style="list-style-type: none"> <li>-The proposed budget is thorough, robust, realistic and cost effective.</li> <li>- The applicant must show a detailed budget with all cost shares explained.</li> </ul>	15		
<p><b>Proposed Project Location</b></p> <ul style="list-style-type: none"> <li>- The project is sited near a major highway or transportation corridor, shipping route, or near a shipping logistics center.</li> <li>- This project will address an environmental justice (EJ) area or related location that receives a disparate proportion of environmental impacts.</li> <li>- The project avoids environmentally sensitive areas or areas containing critical habitats.</li> <li>-Priority will be given to projects in non-attainment and air quality maintenance areas.</li> </ul>	15		
<p><b>Project Timeline</b></p> <p>The proposed project must define when the project will commence and will end.</p>	15		

<b>Project Award Criteria</b>	<b>Points Possible</b>	<b>Points Awarded</b>	<b>Comments</b>
<b>Ability to be Replicated throughout the State</b> - The proposed project has the ability to be replicated throughout the state with other fleets or for public access.	10		
<b>Collaboration with other Entities in the State</b> - The project includes collaborative efforts between the applicant and project team (an anchor fleet or fleets, utility/fuel provider, vehicle dealer, or manufacturer).	10		
<b>Economic Development</b> - The project creates and/or retains local jobs for Delawareans. - The project serves as an economic development engine for local Delaware based companies.	5		
<b>Total Points</b>	<b>100</b>		

### Status Update of Phase 2 Program:

The Department selected two projects for replacement in 2020 under the Request for Proposal NAT19001-VWEMTFP. The Department is partnering with Waste Management, Inc. of Delaware in the replacement of ten (10) solid waste collection units as compressed natural gas (CNG) for the first project. The waste collection units will serve in New Castle and Sussex County, which are both designated as non-attainment areas. This project will use combined Diesel Emission Reduction Act (DERA) grant funds (\$316,019.00) and Volkswagen Mitigation Trust Funds (\$183,981.00).

For the second project, the Department is partnering with The Teens Warehouse, Inc. to replace one diesel school bus with new, electric school bus with associated electric vehicle supply equipment. The electric bus will serve New Castle County. Funds shall cover up to 45% of the cost of an eligible replacement vehicle powered by an engine certified to the 2019 model year or newer standards and the charging infrastructure associated with the new all-electric vehicle. The project will cost \$177,693.75. As previously described, any funds remaining from Phase 2 will rollover

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to Phase 3. The Department estimates that \$2.8M will remain in Phase 2 so Phase 3 will have approximately \$6.0M available.

### Status Update of Phase 3 Program:

The Department selected two projects for replacement in 2021 under the Request for Proposal NAT20002-VWEMTFP. The Department is partnering with Sutton Bus & Truck Company in the replacement of eight (8) diesel school buses with propane buses. The school buses will serve in New Castle County, which is a designated non-attainment area. This project will use combined Diesel Emission Reduction Act (DERA) grant funds (\$57,143.00) and Volkswagen Mitigation Trust Funds (\$128,857.00).

For the second project, the Department is partnering with Bowman Bus Service to replace one diesel school bus with new, clean diesel school bus that will serve Kent County. The project will cost \$25,750.00. Funds shall cover up to 25% of the cost of an eligible replacement bus powered by an engine certified to the 2019 model year or newer. Any funds remaining from Phase 3 will rollover to Phase 4.

During Phase 3 of this funding, DNREC's Division of Climate, Coastal, and Energy will receive 15% (\$1.45M) of the Trust funds to administer a competitive grant program for the deployment of electric vehicle supply equipment (EVSE). Specifically, these funds will be utilized to incentivize the construction and operation of DC Fast Charging stations in the state to provide residents and travelers with convenient and consistent access to electric vehicle supply equipment. Grant funding will be provided for the material costs of publically available DC Fast Charging Stations installed within the state of Delaware. Eligible entities for grant funding will include Delaware-based businesses, not-for-profit organizations, government entities, and educational institutions. Project proposals will be submitted through competitive Request for Proposal process and will be evaluated based on criteria in the categories of:

- Estimated greenhouse gas reductions

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- Proximity to Alternative Fuel Corridors and proximity to high traffic volume routes
  - Accessibility regarding payment options
  - Thoroughness of the Operations and Maintenance Plan
  - Overall project budget and cost effectiveness

The RFP for Electric vehicle supply equipment will be released in Quarter 4 of 2021. Additionally, the Department will allocate up to \$700,000 to replace five (5) Class 8 government-owned dump trucks with the Division of Fish and Wildlife. These vehicles will be used around the state.

#### **Phase 4 - A Hybrid Program:**

The Department estimates that \$3.8M remains from all spending for Phase 4. A competitive request for proposals (RFP) will be released in Quarter 1 2022. In the Competitive RFP, the Department will pursue the following projects:

- School bus replacements with the privately-owned school bus contractors. In Delaware, private school bus contractors provide 2/3 of transportation services to Delaware schools. The Department will allocate funds in the replacement of propane or clean diesel school buses. The contractors are eligible for a 25% cost share and school bus replacements must match the criteria established in Phase 1 - Program Requirements and Phase 2 – Competitive RFP Program.
- All other eligible mitigation actions. The remaining Trust funds will be used for the replacement of eligible mitigation actions listed in Phase 2 – Competitive RFP Program.