

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

## BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary State of Indiana

Lead Agency Authorized to Act on Behalf of the Beneficiary Indiana Department of Environmental Management  
*(Any authorized person with delegation of such authority to direct the Trustee delivered to the Trustee pursuant to a Delegation of Authority and Certificate of Incumbency)*

Action Title:	R5 - Onroad and Nonroad Awards (Pitt Ohio)
Beneficiary's Project ID:	R5 - Pitt Ohio Terminal Truck Replacement
Funding Request No.	(sequential) 123
Request Type: (select one or more)	<input checked="" type="checkbox"/> Reimbursement <input type="checkbox"/> Advance <input type="checkbox"/> Other (specify): _____
Payment to be made to: (select one or more)	<input type="checkbox"/> Beneficiary <input checked="" type="checkbox"/> Other (specify): Grantee: Freight Equipment Leasing as detailed in Attachment A
Funding Request & Direction (Attachment A)	<input type="checkbox"/> Attached to this Certification <input checked="" type="checkbox"/> To be Provided Separately

### SUMMARY

Eligible Mitigation Action	<input type="checkbox"/> Appendix D-2 item (specify): _____
Action Type	<input checked="" type="checkbox"/> Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal): Attached
Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1): See Appendix D-4 Summary Details attachment.	
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2): See Appendix D-4 Summary Details attachment.	
Estimate of Anticipated NOx Reductions (5.2.3): See Appendix D-4 Summary Details attachment.	
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): See Appendix D-4 Summary Details attachment.	
Describe how the Beneficiary will make documentation publicly available (5.2.7.2). <b>See Appendix D-4 Summary Details attachment.</b>	
Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8). See Appendix D-4 Summary Details attachment.	
Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9). <b>See Appendix D-4 Summary Details attachment.</b>	

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 Appendix D-4 Summary Details attachment.

**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**

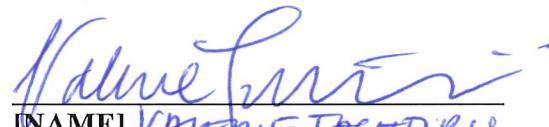
By submitting this application, the Lead Agency makes the following certifications:

1. This application is submitted on behalf of Beneficiary, State of Indiana, 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:

1/23/2025

  
[NAME] Valerie Furtach  
[TITLE] DEPUTY GENERAL COUNSEL  
Indiana Department of Environmental Management

**[LEAD AGENCY]**

for

**State of Indiana**

**[BENEFICIARY]**

## Appendix D-4 Summary Details

### **Eligible Mitigation Action Type:**

Category 1: Class 8 Local Freight Trucks

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

Indiana will generally fund all eligible mitigation action (EMA) types included in Appendix D-2 of the national consent decree. The Mission Statement and Overall Goals are described below:

In promoting the reduction of emissions of NOx, the Indiana Volkswagen Environmental Mitigation Trust Fund Program will prioritize sustainable projects that are transformative, positively impacting the environment, enhancing the health and well-being of residents, and promoting Indiana's growing economy.

The Program will focus on technological change and advancement with resiliency and favoring use of domestic fuel, where possible.

The goals of the Indiana Volkswagen Mitigation Trust Program include:

- Improving air quality across Indiana through cost-effective NOx emission reduction strategies
- Maximizing diesel emission reductions across Indiana, while considering various categories of sensitive populations as areas of specific focus
- Providing appropriate considerations to projects that have diesel emission reductions that go beyond just NOx, including PM<sub>2.5</sub>, hydrocarbons (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>)
- Encouraging leveraging of project partner funds with VW Trust funds to further the reach of the Indiana program

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

This project is for the purchase, installation, operation and maintenance of one (1) 2024 model-year, or newer, U.S. EPA emission compliant (Tier 4) all-electric-powered terminal truck that will REPLACE one (1) of the Grantee's Pre-Tier 4 existing diesel-powered terminal trucks that will be used for the same purpose. The replacement vehicles will be located and primarily operated in Indianapolis, Indiana.

All-electric-powered terminal trucks dramatically improve air quality and the quality-of-life conditions for operators, technicians, and citizens in the areas of operation due to notably lower tailpipe emissions in addition to less noisy engine operations.

The lifetime estimated emission reductions of pollutants according to U.S. EPA's Diesel Emission Quantifier (DEQ) include 1.505 tons of nitrogen oxides (NOx) and 0.071 tons of fine particulate matter (PM<sub>2.5</sub>).

### **Estimate of Anticipated NOx Reductions (5.2.3):**

Over the lifetime of this terminal truck, U.S. EPA's DEQ model estimates this project will result in a NOx reduction of 1.505 tons.

**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):**

Indiana Department of Environmental Management

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

In October of 2017, IDEM published a website with specific information on the national mitigation trust as well as the Indiana program. The website included an opportunity to sign up for automated updates to make sure interested parties were always kept apprised of any changes made to the program website. This web portal will be the location for all information related to the Indiana Volkswagen Mitigation Trust Program.

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

Indiana will use Volkswagen Mitigation Trust funds to reimburse non-government-owned fleet and equipment owners at the levels specified in Appendix D-2 of the national mitigation trust. IDEM will also use Volkswagen Mitigation Trust funds to reimburse government-owned fleets and equipment at the same level as non-government owned fleet and equipment owners, as opposed to the full cost reimbursement permitted by Appendix D-2.

Specifically, for this project, the Indiana Volkswagen Mitigation Trust Program will cover up to 75% of the total project cost while the Grantee and/or other programs covers the remaining 25%.

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

The Indiana Department of Environmental Management notified representatives as identified in Appendix D-2 of the national consent decree via email in March of 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):**

Not applicable to this specific project.

**THE REST OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.**

## Attachment B Details

### **Project Schedule and Milestones:**

Indiana announces Round 5 - Onroad and Nonroad funding opportunity via online Request for Proposals (RFP)	February 16, 2024
Deadline for Round 5 – Onroad and Nonroad program applications	April 30, 2024
Indiana notifies applicants of award decisions	June 18, 2024
Funding Agreement between Indiana and Grantee is fully executed	July 29, 2024
Grantee project implementation	July 29, 2024 to September 30, 2025
Indiana reviews programmatic, financial, and other materials for compliance with Appendix D-2 of the national consent decree	Ongoing
Indiana submits Appendix D-4 to Trustee to initiate payment to Grantee in accordance with Payee Contact and Wire Information form along with other supporting documentation	January 24, 2025
Indiana coordinates with Trustee on any questions or issues that arise related to the submitted Appendix D-4	January 24, 2025 to D-4 approval
Trustee responds to Indiana Appendix D-4	Within 60 days of submittal
Trustee disburses payment to Grantee	Within 15 days of Appendix D-4 approval

### **Project Budget:**

Project Description	Indiana VW Mitigation Trust Grant Not to Exceed Total	Grantee Cost Share Not Less than Total	Project Total
Task A  The purchase, installation, operation and maintenance of one (1) 2024 model-year, or newer, U.S. EPA emission compliant electric-powered terminal tractor that will REPLACE one (1) of the Grantee's model year	\$256,155.00	\$85,385.00	\$341,540.00

1992-2009 existing diesel-powered terminal tractors that will be used for the same purpose. The replacement vehicle will be located and primarily operated in Indianapolis, Indiana.			
Percentage	75%	25%	100%

**State of Indiana Total Trust Allocation:**

1) State of Indiana's Total Trust Allocation	\$40,935,880.59
2) Obligated Awards from Previous D-4 Submittals	\$27,137,890.65
3) State of Indiana's Net Remaining Allocation Prior to this D-4 Submittal	\$13,797,989.94
4) Current D-4 Funding Request Total	\$256,155.00
5) State of Indiana's Remaining Allocation After this D-4 Submittal	\$13,541,834.94

**Projected Allocation Totals per Project Type:**

	<b>Total per Category</b>	<b>Annually Based on Expected Project Reimbursements</b>
<b>Total Trust</b>	\$40,935,880.59	NA
<b>To EV (15%) over 5 years (2021 to 2025)</b>	\$6,140,382.09	\$2,046,794.03
<b>To Admin (3%) over 5 years (2020 to 2025)</b>	\$1,228,076.42	\$307,019.11
<b>To EMAs (82%) over 5 years (2020 to 2025)</b>	\$33,567,422.08	\$11,189,140.69

**THE REST OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.**

**Projected Trust Allocations:**

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
1) Anticipated Annual Project Funding Request to be paid through the Trust	\$3,996,653.40	\$4,841,603.20	\$5,174,086.48	\$7,563,755.37	\$15,000,000.00
2) Anticipated Annual Cost Share (Administrative Costs)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3) Anticipated Total Project Funding by Year (Line 1 + Line 2)	\$3,996,653.40	\$4,841,603.20	\$5,174,086.48	\$7,563,755.37	\$15,000,000.00
4) Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$3,895,454.40	\$4,710,898.20	\$5,165,086.48	\$7,494,846.85	\$5,561,792.20
5) Current Beneficiary Project Funding to be paid through the Trust (Line 1)	\$101,199.00	\$130,705.00	\$9,000.00	\$68,908.52	\$256,155.00
6) Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (Line 4 + Line 5)	\$3,996,653.40	\$4,841,603.20	\$5,174,086.48	\$7,563,755.37	\$5,817,947.20
7) Beneficiary Share of Estimated Funds Remaining in Trust at Beginning of Year	\$40,935,880.59	\$36,939,227.19	\$32,097,623.99	\$26,923,537.51	\$19,359,782.14
8) Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (Line 7 – Line 6)	\$36,939,227.19	\$32,097,623.99	\$26,923,537.51	\$19,359,782.14	\$13,541,834.94

THE REST OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.

## **Attachment C Details**

### **Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11):**

The Indiana Department of Environmental Management (IDEM) is committed to meet the reporting requirements as detailed in Subparagraph 5.3 of the Environmental Mitigation Trust Agreement for State Beneficiaries. Specifically, this subparagraph states:

“For each Eligible Mitigation Action, no later than six months after receiving its first disbursement of Trust Assets, and thereafter no later than January 30 (for the preceding six-month period of July 1 to December 31) and July 30 (for the preceding six-month period of January 1 to June 30) of each year, each Beneficiary shall submit to the Trustee a semiannual report describing the progress implementing each Eligible Mitigation Action during the six-month period leading up to the reporting date (including a summary of all costs expended on the Eligible Mitigation Action through the reporting date). Such reports shall include a complete description of the status (including actual or projected termination date), development, implementation, and any modification of each approved Eligible Mitigation Action.

Beneficiaries may group multiple Eligible Mitigation Actions and multiple sub-beneficiaries into a single report. These reports shall be signed by an official with the authority to submit the report for the Beneficiary and must contain an attestation that the information is true and correct and that the submission is made under penalty of perjury. To the extent a Beneficiary avails itself of the DERA Option described in Appendix D-2, that Beneficiary may submit its DERA Quarterly Programmatic Reports in satisfaction of its obligations under this Paragraph as to those Eligible Mitigation Actions funded through the DERA Option. The Trustee shall post each semiannual report on the State Trust’s public-facing website upon receipt.”

IDEM will meet these obligations in coordination with our project partners. Project partners are obligated to provide IDEM the necessary information for reports to the Trustee through the Funding Agreements between IDEM and each project partner. This language states:

#### **“4. Implementation and Reporting Requirements**

A. The Grantee shall implement and complete the Project in accordance with **Attachment A** and the plans and specifications contained in its Funding Application. Modification of the Project shall require prior written approval from IDEM. If IDEM determines that the Grantee is not making adequate progress in implementation of the approved Project in accordance with **Attachment A**, IDEM may rescind the award.

B. The Grantee shall submit to IDEM written progress reports until the completion of the Project. These reports shall be submitted in accordance with the reporting schedule contained in **Attachment C** and shall contain such detail of progress or performance on the Project as is required under the terms of the Volkswagen Diesel Emissions Environmental Mitigation Trust. If additional documentation is required for IDEM to meet reporting obligations under the Volkswagen Diesel Emissions Environmental Mitigation Trust, IDEM may request such documentation as necessary at any time during the term of this Agreement.”

**Attachment D Details**

**Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding \$25,000 (5.2.6):**

Detailed in the following pages:

**INVOICE:**  
**11/13/2024**

To: Indiana Department of Environmental Management  
Attn: Shawn M. Seals  
Office of Air Quality -Mail Code 61-50

100 N Senate Ave  
Indianapolis, IN 46204-2251

RE: IN VW Settlement Round 5-012

Amount \$256,155.00

Total Amount Paid:	\$341,540 for one EV Terminal Tractor
Grant Request:	\$256,155
Cost Share:	\$85,385.00

Bank:	PNC Bank
ABA/Routing Number:	
SWIFT:	
Account Number:	412-762-2149
Bank Phone #:	
Name on Account:	Freight Equipment Leasing, LLC.
Bank Address:	Pittsburgh, PA

# Invoice



## Orange EV

900 N. 69th Street  
Kansas City, KS  
USA, 66102  
Phone : 866-688-5223  
AccountsReceivable@OrangeEV.com

Invoice No.	00140016
Date	09/26/2024
Contact	

Bill To	40631-01
Freight Equipment Leasing, LLC	
15 27th Street,	
Pittsburg, Pennsylvania	
USA, 15222	

Ship To	40135-03
Pitt Ohio	
1235 Terminal Road,	
Indianapolis, Indiana	
USA, 46217	

PO No.	Sales Order No.	Shipping No.	Reference No.	Ship Method	Payment Terms
VIN-00013040	00029908			Non applicable	0.5% 10 days net 30
Sales Rep	Shipping Date		Carrier		Due Date
Price Oliver (E0130)			Not Applicable		10/19/2024

No.	Qty	UN	Item	Description	Retail Price		Net Price	Amount
1	1	1	CFGPROD_TRUC K_DTS	DTS Truck, to be configured for Specific Jobs	\$344,040.00		\$344,040.00	\$344,040.00
2	1	1	SALES DISCOUNTS	New Customer Discount	(\$2,500.00)		(\$2,500.00)	(\$2,500.00)

REBILLED LESS SALES TAXES. ORG INV# 00139822 - CREDITED ON INV# 00140015 - K. WALKER.

TRUCK NAME: PITT1

CHARGING CABINET SERIAL# CBU24-1073

TRUCK SERIAL# DKXD24-005347

VIN# 1Z9BA8EA4RK530278

Subtotal:	\$341,540.00
Taxes:	\$0.00
<b>Total:</b>	<b>\$341,540.00</b>
Payment:	\$0.00
Balance:	\$341,540.00

USD

10/3/2024

195 / INCOMING MONEY TRANSFER

Credit Amount:

341,540.00

Cust Ref: 0000000000

Bank Ref: IA009905144395

Unique ID: [REDACTED]

WT FED#09945 PNC BANK, N.A. /ORG=FREIGHT EQUIPMENT LEASING LLC SRF#24A3H1634JK4325Y

TRN#241003117035 RFB# 00140016

## 2024 Indiana Volkswagen Environmental Mitigation Trust Program – Final Round Pitt Ohio

### Scoring Criteria Summary

#### I. Cost Effectiveness of project (\$ per ton of NOx reduced)

This Zero Emissions Terminals (ZET) project has a value of \$19,655 per NO<sub>x</sub> ton reduced.

#### II. Transformational potential

This ZET project is transformational due to its ability to improve Pitt Ohio's carbon footprint. The replacement of terminal trucks represents a reduction in supply chain emissions for every transit day Pitt Ohio partakes in.

#### III. Project's total NOx emission reduction potential (based on the use of the vehicle).

This project will reduce over 18 short tons of NO<sub>x</sub> over the 20-year life of this project.

#### IV. National Ambient Air Quality Standards (NAAQS) sensitive areas as a percentage of current standards.

ZET is taking place near Indianapolis, IN which is located in Marion County, IN. This region was classified as a nonattainment area at various times over the past 32 years due to the 1-hour & 8-hour Ozone standard, the Carbon Monoxide standard, The lead standard, the PM-2.5 standard, and the Sulfur Dioxide standard.

#### V. Air quality benefits to areas with sensitive populations or that bear a disproportionate share of the air pollution burden.

The EPA 2020 National Emissions Inventory shows that Indiana's NO<sub>x</sub> emissions are 679 tons, and the county's 85 tons. The state's total on-road diesel National Air Toxics Assessment from 2014 indicates that the state diesel PM levels are 0.388 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), whereas the Marion County levels of diesel PM are higher, at 0.832  $\mu\text{g}/\text{m}^3$ . In terms of poverty level, the US census shows that Marion County stands at 15.7%, slightly higher than the state average of 12.6%. Moreover, the percentage of children (18 and younger) in Marion County is 24.4%, surpassing the statewide figure of 23.0%. Additionally, the percentage of elderly (65+) in the county, 13.5%, deviates from the state average of 16.9%. Finally, considering the minority population, the county shows a proportion of 48.2%, compared to the state's 23%.

#### VI. Leveraging of Resources (financial or resource match).

Pitt Ohio will provide a 25% cost share of the project. Pitt Ohio also estimates that the charging station equipment will cost \$9,500.00. Additionally, the ZET project will require \$17,320.00 for electrical infrastructure. This project is not requesting funding for the charging stations or the infrastructure installation. This project combines the cost efficiency and emission reductions from all-electric terminal trucks.

#### VII. Entities registered with the Indiana Secretary of State that operate vehicles and equipment in conjunction with Indiana facilities.

Yes, see the attached Indiana Economic Impact documentation.

#### VIII. Active participant in the State of Indiana, Department of Administration, or Department of Transportation Minority/Women/Veterans Business Enterprise Participation Plan

Yes, Pitt Ohio is an active participant in the State of Indiana, with the business ID 1999091718.

## 2024 Indiana Volkswagen Environmental Mitigation Trust Program – Final Round

### ZET Terminal Truck Replacement Project

#### Narrative Work Plan

**PROJECT TITLE:** Zero Emissions Terminals (ZET)

**SOLICITATION:** 2024 Indiana Volkswagen Environmental Mitigation Trust Program – Final Round

**CATEGORY:** Nonroad Equipment Replacement  
All Electric Terminal Truck

**GRANTEE INFO:** Taki Darakos  
Freight Equipment Leasing, LLC.  
1235 Terminal Road, Indianapolis, IN 46217  
Phone: 412-232-3015 ext. 6263

**Table 1. General Fleet Information**

<b>Number of Vehicles/Equipment to Replace</b>	1 Terminal Truck (2006 Ottawa Commando 30)
<b>Total Annual Fuel Usage</b>	4,690 diesel gallons
<b>Total Annual Hour Usage</b>	1,513 Hours
<b>Estimated Monthly Idle Hours</b>	14 Hours
<b>Estimated Monthly Fuel Consumption</b>	391 Diesel Gallons
<b>Estimated Monthly Hourly Use</b>	127 Hours
<b>Equipment to be Replaced (Engine Details)</b>	2005 Cummins 5.9 (Tier 2, 240 HP)
<b>Proposed New Equipment</b>	(1) 2024 Orange EV e-TRIEVER
<b>Estimated Years to Remain in Active Fleet</b>	20 Years

**FUNDING REQUESTED:** \$266,960.85

**APPLICANT MATCH:** \$88,986.95

**TOTAL PROJECT COST:** \$355,947.95

Table 2. Budget Summary

Source	Type	Amount	Cost Share
2024 DieselWise Indiana Funding	Grant	\$266,960.85	75%
Applicant Share - Pitt Ohio	Cash	\$88,986.95	25%
<b>TOTAL</b>		<b>\$355,947.80</b>	

## PROJECT PERIOD

In Table 3, the Zero Emissions Terminals project timeline is planned out over the following two years, with dates, tasks, and deliverables for the successful implementation of this project. Once awarded, this project will be completed within the given timeframe of September 30th, 2025. Pitt Ohio plans to develop electrical infrastructure and install one on-site *Enhanced Offboard Charging Cabinet (480 VAC, 22kW* before the delivery of their new all-electric terminal truck replacement in 2025.

Table 3. Project Timeline & Milestones

Year	2024							2025								
Month	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Grant Award Notification	X															
IN Contracts Agreement		X														
Place Order of EV Terminal Trucks			X													
EV Terminal Truck Delivery								X	X							
Pitt Ohio Staff Training									X							
Old Truck/Engine Destruction & Certification										X	X					
Charging Station Delivery							X									
Charging Station Install								X								
Quarterly Reports	X			X			X			X			X		X	
Vendor/Equipment Payment								X	X							
Request for Reimbursement										X						
Marketing & Outreach									X	X	X				X	
Final Report															X	

## GENERAL FLEET BACKGROUND

Freight Equipment Leasing, LLC., doing business as Pitt Ohio, has established itself as a prominent leader in the logistics industry since its inception as an LTL carrier in 1979. This family-owned business has expanded its operations across the Midwest and Northeast, hosting 25 terminal locations. With an impressive fleet of 800 Class 8 tractors, 2,000 trailers, and various Class 6-7 units, Pitt Ohio covers a substantial 8 million miles monthly, focused on terminal-to-terminal

routes. Their dedication to sustainability has been proven through initiatives at the Parma, Ohio Terminal, which is a Leadership in Energy & Environmental Design (LEED) certified building that encompasses solar panels and wind turbines that produce 540,000 kWh of renewable energy. This renewable energy can be stored onsite in the 1 MW microgrid. The Parma, OH terminal also boasts four electric class 7 all-electric straight trucks.



Figure 1. Pitt Ohio Indianapolis

Pitt Ohio is an EPA SmartWay Truck Carrier Partner and has implemented other emission reduction projects across its fleet which include CNG class 8 trucks, propane forklifts, and all-electric forklifts. For example, at its Indianapolis Terminal, Pitt Ohio showcases its commitment to electric mobility by adopting three all-electric forklifts. In 2022, Pitt Ohio authored its Sustainability Report, which highlighted notable reductions in emissions from trucks (down 7.6% over 5 years), electricity usage (down 4%), propane (down 13%), and company cars & air travel (down 50%). This highlights the company's commitment to sustainable transportation and environmental stewardship.

As Pitt Ohio navigates the complex landscape of freight electrification, the company displays both pragmatism and innovation. Recognizing the challenges and costs associated with EV integration, they forge partnerships with industry leaders like Volvo and collaborate with local universities. Their focus on education and community involvement underscores a holistic approach to innovation. Having shown exceptional initiative in aligning electric mobility with sustainable action, Pitt Ohio was dubbed a Top Green Fleet by Heavy Duty Truck Magazine. With its blend of operational excellence, environmental consciousness, and a drive for progress, Pitt Ohio emerges as a resilient and adaptable force in the ever-evolving transportation sector.

## PROJECT DESCRIPTION

Pitt Ohio's Indianapolis terminal is initiating a transformative project to enhance sustainability in its operations. This involves replacing its one diesel terminal truck with an advanced all-electric model, aligning with the company's goals of contributing to reduced greenhouse gas emissions and climate resilience. The adoption of all-electric terminal trucks not only demonstrates Pitt Ohio's commitment to environmental stewardship but also sets a new efficiency standard in the industry, offering long-term cost savings.

By embracing emerging technologies and modernizing its fleet, the company aims to strengthen its operational capabilities and uphold its leadership position. Additionally, transitioning to all-electric terminal trucks provides an opportunity for Pitt Ohio to highlight its dedication to corporate social responsibility, showcasing its commitment to sustainable transportation solutions. Ultimately, replacing diesel trucks with all-electric models marks a significant advancement for Pitt Ohio, improving operational efficiency while setting a positive example for the industry at large.

## AIR QUALITY BENEFITS

The ZET terminal truck replacement project will take place at Pitt Ohio's Indianapolis Terminal, located in Marion County, Indiana. As seen in Table 4, the Marion County demographics underscore the critical need for air quality improvement in the county. As identified through the Climate & Economic Justice Screening Tool (CEJST), the local population is in the 40 percentiles of individuals living with asthma and in the 54th percentile of low-income households. Clean air is a step in revitalizing the communities of this region.

The EPA 2020 National Emissions Inventory shows that Indiana's NO<sub>x</sub> emissions are 679 tons, and the county is 85 tons. The state's total on-road diesel National Air Toxics Assessment from 2014 indicates that the state diesel PM levels are 0.388 micrograms per cubic meter (µg/m<sup>3</sup>), whereas the Marion County levels of diesel PM are higher, at 0.832 µg/m<sup>3</sup>. In terms of poverty level, the US census shows that Marion County stands at 15.7%, slightly higher than the state average of 12.6%. Moreover, the percentage of children (18 and younger) in Marion County is 24.4%, surpassing the statewide figure of 23.0%. Additionally, the percentage of elderly (65+) in the county, 13.5%, deviates from the state average of 16.9%. Finally, considering the minority population, the county shows a proportion of 48.2%, compared to the state's 23%.

**Table 4. Area Demographics for Air Quality Benefit Assessment**

Location	NO <sub>x</sub> (tons)	Diesel PM (µg/m <sup>3</sup> )	Poverty %	<18 years %	>65 years %	Minority %
Marion County	85.2	0.832	15.7	24.4	13.5	48.2
Indiana	678.6	0.388	12.6	23.0	16.9	23.0

In Table 5, the ZET project emissions were calculated using the U.S. EPA Diesel Emission Quantifier (DEQ). Through the implementation of this project, approximately 18 short tons of NOx will not be emitted. As a result of this emission reduction, the negative health effects of exposure from NOx for people with asthma, children, and older adults will decrease in frequency. Considering the CO<sub>2</sub> and other emissions quantified by the DEQ, all emissions and criteria air pollutants are reduced.

**Table 5. Terminal Truck Replacement - Estimated Annual Emissions Reductions**

<b>ANNUAL RESULTS (short tons)</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	<b>HC</b>	<b>CO</b>	<b>CO<sub>2</sub></b>	<b>Fuel</b>
<b>Baseline for Upgraded Vehicles</b>	0.905	0.043	0.079	0.297	52.8	4,690
<b>Amount Reduced After Upgrades</b>	0.905	0.043	0.079	0.297	52.8	4,690
<b>Percent Reduced After Upgrades</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>LIFETIME RESULTS (short tons)</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	<b>HC</b>	<b>CO</b>	<b>CO<sub>2</sub></b>	<b>Fuel</b>
<b>Baseline for Upgraded Vehicles</b>	18.110	0.852	1.582	5.947	1,055.3	93,800
<b>Amount Reduced After Upgrades</b>	18.110	0.852	1.582	5.947	1,055.3	93,800
<b>Percent Reduced After Upgrades</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>LIFETIME COST EFFECTIVENESS (\$/short ton reduced)</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	<b>HC</b>	<b>CO</b>	<b>CO<sub>2</sub></b>	<b>Fuel</b>
<b>Total Cost Effectiveness</b>	\$19,655	\$417,844	\$225,001	\$59,849	\$337	-

## ANTICIPATED OUTCOMES

As part of the Pitt Ohio overall sustainability and diesel emission reduction, this project will replace one diesel-powered terminal truck with a 2024 Orange EV e-TRIEVER all-electric terminal truck. The Orange EV e-TRIEVER terminal truck has a GCWR of 81,000 lbs and a 180-kWh battery capacity. The Orange e-TRIEVER terminal truck is capable of a 70kW charging rate and has an operating range of over 24 hours. Through the replacement of the existing diesel-powered terminal trucks, this ZET project is expected to displace 4,690 diesel gallons in the first year alone. Over the twenty-year life of this project, it is expected that over 93,800 diesel gallons will be displaced as a result of this project.

Founded in 2012, Orange EV is the vendor selected for this project due to its exemplary track record in the all-terminal truck industry. Since 2015, Orange EV has deployed over 1000 all-electric terminal trucks with over 220 fleets across 35 states in the United States, and in Ontario, Canada. The deployed fleets have surpassed 11.5 million miles traveled, and over 3.9 million hours of operation. In the terminal truck industry, equipment is extremely important in logistics services.

Orange EV boasts an impressive average uptime of 98% to 99%, coupled with a total cost of ownership significantly lower than that of conventional diesel terminal trucks. This translates to a return on investment within 3 to 4 years. The primary factor contributing to its successful deployments over other all-electric terminal trucks is its efficient low-voltage control system.

## METRICS

Table 6. Anticipated Target Metrics		
Performance Measures	Current (2024)	Target (2025)
Volume of Diesel Used Annually (diesel gallon equivalents)	4,690	0
Volume of Diesel Displaced Annually (gallons)	0	4,690

## LOCATION AND HOURS OPERATION

This project is located at 1235 Terminal Road, Indianapolis, Indiana. The facility houses the corporate headquarters for the entire Pitt Ohio company, as well as hosts one of the terminal locations that service locations across the northwest, with a focus on the midwestern United States. This facility operates 18 hours a day, 6 days a week, and 52 weeks a year.

## GRANTEE AND PARTNERS ROLES

Drive Clean Indiana (DCI) is an Indiana 501(c)(3) nonprofit organization whose aim is to educate and assist both public and private fleet owners and individuals. The purpose of DCI is to help meet the requirements of the national Energy Policy Act of 1992, which is aimed at promoting national energy security, and to help meet the requirements of the federal Clean Air Act as amended in 1990, which strives to promote clean air. DCI is a SmartWay Affiliate Partner and is committed to promoting the use of alternative fuels as well as idle and fuel use reduction and air quality improvement efforts.

In addition to the purchase, installation, and deployment activities, Pitt Ohio personnel will also work with DCI to track performance and fuel reduction on the existing equipment to provide a point of comparison to evaluate the success of the projects. The same analytics will be tracked on the new all-electric terminal trucks once deployed. In addition to tracking performance and estimated reduction in tailpipe emissions; hours of operation, efficiencies, and fuel cost savings will be assessed. The data collected will allow for evaluation of the public benefits of the project for the life of the vehicle.

DCI will also work with the IDEM/VW Advisory Committee and Pitt Ohio personnel to implement the following aspects of this project:

- Promoting diesel emission reduction projects, use policies, education and

# PITT OHIO

SUPPLY CHAIN ■ GROUND ■ LTL ■ TL

awareness programs with its employees.

- Celebrating and announcing the success of these projects with a press conference with IDEM

Pitt Ohio is a member of the Indiana Green Fleet Program, which prompts partnerships & training with:

- IDEM DieselWise
- IDEM Partners for Clean Air
- IDEM Environmental Stewardship Program
- IDEM Partners for Pollution Prevention
- ASE Mechanic Training
- U.S. EPA Midwest Clean Diesel Initiative and SmartWay Affiliate
- National Fire Protection Association



## KEY PERSONNEL CONTACT INFORMATION

Table 7. Project Contacts

Contact	Organization/Title	Phone	Email
Taki Darakos	Freight Equipment Leasing/Vice President of Vehicle Maintenance & Fleet Services	412-232-3015	edarakos@pittohio.com
Ryan Lisek	Drive Clean Indiana/Project Manager	219-644-3690	rlisek@drivecleanindiana.org

## EVALUATION CRITERIA

The ZET project addresses diesel emission reduction at a supply chain terminal facility. The location of this facility and the high activity of its diesel engine terminal truck make this a great location to deploy an industry-proven zero-emission project. The need for decarbonizing the heavy-duty vehicle logistics industry is essential to the economic growth of the Crossroads of America. Being able to reduce the emissions from the supply chain for each transit day will benefit the national footprint of this company.

# PITT OHIO

SUPPLY CHAIN ■ GROUND ■ LTL ■ TL

Pitt Ohio is a family-owned Indiana company that has been in business for over 44 years.

Through this all-electric terminal truck project, Pitt Ohio will look to electrify other on-road units at the Indianapolis facility to improve air quality and diesel emission reductions into the future.

## BUDGET

**Table 8. Terminal Truck Replacement Project Budget Line Items**

Equipment	Units	2024 IN VW Settlement Funding – (75%)	Applicant Cost-Share Funds (25%)
2024 Orange EV E-TRIEVER (All-Electric, 180 kWh)	1	\$266,960.85	\$88,986.95
<b>PROJECT GRAND TOTAL</b>			<b>\$355,947.80</b>

## ATTACHMENTS

- I. State Form 47551 - Automated Direct Deposit Authorization Agreement
- II. State Form 51778 - Indiana Economic Impact - Proposals & Contracts
- III. Pitt Ohio Letters of Cost Share Commitment
- IV. Pitt Ohio and Freight Equipment Leasing W-9
- V. Orange EV e-TRIEVER Equipment Quotes
- VI. Indiana Fleet Data Spreadsheet (attached in email)