

**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)

<b>Action Title:</b>	R5 - Onroad and Nonroad Awards (Tire Rack)
<b>Beneficiary's Project ID:</b>	R5 - Tire Rack 2 Terminal Trucks Replacement
<b>Funding Request No.</b>	(sequential) 122
<b>Request Type:</b> (select one or more)	<input checked="" type="checkbox"/> Reimbursement <input type="checkbox"/> Advance <input type="checkbox"/> Other (specify): _____
<b>Payment to be made to:</b> (select one or more)	<input type="checkbox"/> Beneficiary <input checked="" type="checkbox"/> Other (specify): Grantee: The Tire Rack as detailed in Attachment A
<b>Funding Request &amp; Direction (Attachment A)</b>	<input type="checkbox"/> Attached to this Certification <input checked="" type="checkbox"/> To be Provided Separately

### SUMMARY

<b>Eligible Mitigation Action</b>	<input type="checkbox"/> Appendix D-2 item (specify): _____
<b>Action Type</b>	<input checked="" type="checkbox"/> Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal): Attached
<b>Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1):</b> See Appendix D-4 Summary Details attachment.	
<b>Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):</b> See Appendix D-4 Summary Details attachment.	
<b>Estimate of Anticipated NOx Reductions (5.2.3):</b> See Appendix D-4 Summary Details attachment.	
<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> See Appendix D-4 Summary Details attachment.	
<b>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).</b> See Appendix D-4 Summary Details attachment.	
<b>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.	

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)**

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

[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 NO<sub>x</sub>, 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 NO<sub>x</sub> 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 NO<sub>x</sub>, 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 two (2) 2024 model-year, or newer, U.S. EPA emission compliant (Tier 4) all-electric-powered terminal trucks that will REPLACE two (2) 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 South Bend, 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 4.595 tons of nitrogen oxides (NO<sub>x</sub>) and 0.442 tons of fine particulate matter (PM<sub>2.5</sub>).

### **Estimate of Anticipated NO<sub>x</sub> 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 4.595 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 73% of the total project cost while the Grantee and/or other programs covers the remaining 27%.

**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.

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### **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 25, 2024
Grantee project implementation	July 25, 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:**

<b>Project Description</b>	<b>Indiana VW Mitigation Trust Grant Not to Exceed Total</b>	<b>Grantee Cost Share Not Less than Total</b>	<b>Project Total</b>
Task A  The purchase, installation, operation and maintenance of two (2) 2024 model-year, or newer, U.S. EPA emission compliant electric-powered terminal tractors that will REPLACE two (2) of the Grantee's model year	\$520,392.00	\$188,899.12	\$709,291.12

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 South Bend, Indiana.			
Percentage	73%	27%	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	\$26,617,498.65
3) State of Indiana's Net Remaining Allocation Prior to this D-4 Submittal	\$14,318,381.94
4) Current D-4 Funding Request Total	\$520,392.00
5) State of Indiana's Remaining Allocation After this D-4 Submittal	\$13,797,989.94

**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

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**Projected Trust Allocations:**



	2020	2021	2022	2023	2024
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	\$5,041,400.20
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	\$520,392.00
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	\$5,561,792.20
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	\$13,797,989.94

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## **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:



7101 Vorden Parkway  
South Bend, IN 46628  
800 428 8355  
574 287 2345  
Fax: 574 236 7707  
[www.tirerack.com](http://www.tirerack.com)

October 7, 2024

		DESCRIPTION		
		<b>To: Indiana Department of Environmental Management</b> <b>Attn: Shawn M. Seals</b> <b>Office of Air Quality -Mail Code 61-50</b>  <u>100 N Senate Ave</u> <u>Indianapolis, IN 46204-2251</u>  RE: IN VW Settlement Round 5-013  <b>Amount \$520,392.00</b>   Total Amount Paid:       \$709,291.12 for Two EV Terminal Tractors Grant Request:           \$520,392.00 Cost Share:               \$188,899.12   Bank:                       Wells Fargo Bank, N.A. ABA/Routing Number:    [REDACTED] SWIFT:                    [REDACTED] Account Number:         [REDACTED] Bank Phone #:            (385) 415-8014 Name on Account:         The Tire Rack, Inc.  Bank Address:            420 Montgomery Street San Francisco, CA 94104		

# Invoice



## Orange EV

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

Invoice No.	<b>00139827</b>
Date	09/24/2024
Contact	Phone : 5742872345x4755

<b>Bill To</b>	<b>40615</b>
Tire Rack	
7101 Vorden Parkway,	
South Bend, Indiana	
USA, 46628	

<b>Ship To</b>	<b>40615</b>
Tire Rack	
7101 Vorden Parkway,	
South Bend, Indiana	
USA, 46628	

PO No.	Sales Order No.	Shipping No.	Reference No.	Ship Method	Payment Terms
MICHAELANDERSON	00028723	00024381		Non applicable	0.5% 10 days net 30
Sales Rep		Shipping Date	Carrier		Due Date
Craig Anderson (E0123)		09/16/2024	Not Applicable		10/24/2024

No.	Qty	UN	Item	Description	Retail Price		Net Price	Amount
1	1	ea	1CFGPROD_Truck_DTS	DTS Truck, To be configured for specific Jobs	\$335,610.00		\$335,610.00	\$335,610.00
2	1	ea	Sales Discount	New Customer Discount	(\$2,500.00)		(\$2,500.00)	(\$2,500.00)

TRUCK NAME: TIRR2  
CHARGING CABINET SERIAL# CBU24-1129  
TRUCK SERIAL# DKXD24-005323  
VIN# 1Z9BA8EA3RK530255

Subtotal:	\$333,110.00
Taxes:	\$23,317.70
<b>Total:</b>	<b>\$356,427.70</b>
Payment:	\$0.00
<b>Balance:</b>	<b>\$356,427.70</b>

**\*\* Discount of \$1,782.14 available if payment received by the 10/04/2024 \*\***

USD

*Mark Veldman*

# Invoice



## Orange EV

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

Invoice No.	<b>00139826</b>
Date	09/24/2024
Contact	Phone : 5742872345x4755

<b>Bill To</b>	<b>40615</b>
Tire Rack	
7101 Vorden Parkway,	
South Bend, Indiana	
USA, 46628	

<b>Ship To</b>	<b>40615</b>
Tire Rack	
7101 Vorden Parkway,	
South Bend, Indiana	
USA, 46628	

<b>PO No.</b>	<b>Sales Order No.</b>	<b>Shipping No.</b>	<b>Reference No.</b>	<b>Ship Method</b>	<b>Payment Terms</b>
MICHAELANDERSON	00028723	00024380		Non applicable	0.5% 10 days net 30
<b>Sales Rep</b>		<b>Shipping Date</b>	<b>Carrier</b>		<b>Due Date</b>
Craig Anderson (E0123)		09/16/2024	Not Applicable		10/24/2024

No.	Qty	UN	Item	Description	Retail Price		Net Price	Amount
1	1	ea	1CFGPROD_Truck_DTS	DTS Truck, To be configured for specific Jobs	\$335,610.00		\$335,610.00	\$335,610.00
2	1	ea	Sales Discount	New Customer Discount	(\$2,500.00)		(\$2,500.00)	(\$2,500.00)

TRUCK NAME: TIRR1  
CHARGING CABINET SERIAL# CBU24-1125  
TRUCK SERIAL# DKXD24-005376  
VIN# 1Z9BA8EA1RK530254

Subtotal:	\$333,110.00
Taxes:	\$23,317.70
<b>Total:</b>	<b>\$356,427.70</b>
Payment:	\$0.00
<b>Balance:</b>	<b>\$356,427.70</b>

**\*\* Discount of \$1,782.14 available if payment received by the 10/04/2024 \*\***

USD

CO 01 API058R A/P EFT HISTORY INQUIRY

Vendor 050802 ORANGE EV LLC  
KANSAS CITY KS 66102  
US

A/P Phone..... (000) 000-0000 0000 Contact..

Bank Code WTRK WELLS FARGO BANK, N.A.

EFT # \_\_\_\_\_

Sel	EFT #	Bank	Pmt Date	Book Amt
	45865	WTRK	10/02/24	709291.12

10/3/2024

169 / MISCELLANEOUS ACH CREDIT

Cust Ref: 000000000000

Unique ID: [REDACTED]

THE TIRE RACK IN A/P EFT XXXXX7520 ORANGE EV LLC

Credit Amount:

709,291.12

Bank Ref: IA000010230823





## 2024 Indiana Volkswagen Environmental Mitigation Trust Program – Final Round Tire Rack, LLC

### Scoring Criteria Summary

- I. Cost Effectiveness of project (\$ per ton of NO<sub>x</sub> reduced)**  
This Zero Emissions Tire Distribution (ZETD) project has a value of \$28,999 per NO<sub>x</sub> ton reduced.
- II. Transformational potential**  
This ZETD project is transformational due to the overall carbon footprint. These trucks represent the amount of product that is distributed at this facility. For example, these ZETD terminal trucks will be reducing supply chain emissions for every distributed tire.
- III. Project's total NO<sub>x</sub> emission reduction potential (based on the use of vehicle).**  
This project will reduce over 23 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.**  
ZETD is taking place near South Bend, IN. This region was classified as a nonattainment area from 1992 to 1993 due to the 1-Hour Ozone standard. From 2004 to 2006, it was classified as a nonattainment area again, due to the 8-Hour Ozone 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 678.6 tons, and the county is 24.1 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 St. Joseph County levels of diesel PM are higher, at 0.452 µg/m<sup>3</sup>. In terms of poverty level, the US census shows St. Joseph County stands at 13.2%, lower than the state average of 12.6%. Moreover, the percentage of children (18 and younger) in St. Joseph County is 23.0%, equaling the statewide figure of 23.0%. Additionally, the percentage of elderly (65+) in St. Joseph County, 16.9%, equal to the state average of 16.9%. Finally, considering the minority population, St. Joseph County shows a distinct proportion of 29.6%, compared to the state average of 23.0%.
- VI. Leveraging of Resources (financial or resource match).**  
Tire Rack will provide a 25% cost share of the project. Tire Rack also estimates that the charging station equipment will cost \$19,000.00. This project is not requesting funding for the charging stations or the infrastructure install. 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 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, Tire Rack is an active participant in the State of Indiana, with the business ID 197307263.



**2024 Indiana Volkswagen Environmental Mitigation Trust Program – Final Round  
Zero Emission Tire Distribution**

**Narrative Work Plan**

**PROJECT TITLE:** Zero Emissions Tire Distribution (ZETD)  
**SOLICITATION:** 2024 Indiana Volkswagen Environmental Mitigation Trust Program – Final Round  
**CATEGORY:** Nonroad Equipment Replacement  
All Electric Terminal Truck  
**GRANTEE INFO:** Connor Edmonds  
South Bend Tire Rack Center  
7101 Vorden Parkway  
South Bend, IN 46628  
Phone: 574-287-2345 ext. 4755

Table 1. General Fleet Information	
Number of Vehicles/Equipment to Replace	2 Terminal Trucks
Total Annual Hour Usage	2,649 Hours
Estimated Monthly Idle Hours	24 Hours
Estimated Monthly Fuel Consumption	916 Diesel Gallons
Estimated Monthly Hourly Use	221 Hours
Equipment to be Replaced (Engine Details)	1997 Cummins B5.9 (Tier 1, 200 HP) 2012 Cummins ISB6.7 (Tier 3, 200 HP)
Proposed New Equipment	(2) 2024 Orange EV e-TRIEVER
Estimated Years to Remain in Active Fleet	20 Years

**FUNDING REQUESTED:** \$520,391.55  
**APPLICANT MATCH:** \$173,463.85  
**TOTAL PROJECT COST:** \$693,855.40

Table 2. Budget Summary			
Source	Type	Amount	Cost Share
2024 IN VW Funding	Grant	\$520,391.55	75%
Applicant Share - Tire Rack	Cash	\$173,463.85	25%
TOTAL		\$693,855.40	

## PROJECT PERIOD

In Table 3, the Zero Emissions Tire Distribution 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. Tire Rack plans to install two on-site *Enhanced Offboard Charging Cabinet (480 VAC), 22kW* prior to 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							
Tire Rack 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

Tire Rack, Inc., is a family-owned tire distribution business headquartered out of South Bend, Indiana. Their significant impact on the tire industry has allowed Tire Rack to develop 12 distribution centers spanning the continental United States. Founded in 1979, Tire Rack has accrued over 650 employees. Their operations span from product acquisition, product installation, and technical consultation. To ensure the successful operations of the South Bend facility, they have two terminal trucks that make up their

fleet. This fleet incurs an environmental impact. Therefore, they are looking to improve their footprint through the deployment of all-electric terminal trucks. To provide accessible workplace charging for their employees, the South Bend facility hosts a 6kW EV charging station. Their dedication to environmental stewardship was also reflected in their recent collaboration with Drive Clean Indiana. The vehicle test track at the South Bend Distribution Center hosted an electric vehicle test drive with 49 attendees. This was a great event that allowed local municipalities officials within the MACOG area to drive an EV for the first time. This test drive event hosted by GOEVIN included two Ford F-150 Lightnings, one Chevy Blazer EV, one Nissan Leaf, one Chevrolet Bolt EUV, two Tesla EVs, and two Ford Mach-Es. Here is a link to the event's video: <https://www.youtube.com/watch?v=3v7txUjEhG8>.

The mission of Tire Rack is to provide consistent quality in their automotive products through their highly trained experts, reflecting a high standard of vehicle safety and customer service. They actively pursue their mission by obeying statutory and regulatory requirements, while ensuring customer satisfaction. To guarantee the successful implementation of their mission, Tire Rack reviews their objectives to ensure that they reflect the needs and expectations of their stakeholders. Tire Rack currently has two level 2 charging stations available for use by the employees.

## **PROJECT DESCRIPTION**

Tire Rack, headquartered in South Bend, is revolutionizing its tire distribution operations in Indiana by replacing its two diesel terminal trucks with two advanced all-electric models. This strategic move not only aligns with the company's sustainability goals but also significantly reduces greenhouse gas emissions associated with its operations. By transitioning to all-electric trucks, Tire Rack anticipates substantial long-term cost savings, thanks to lower operating and maintenance expenses compared to existing diesel terminal trucks.

The adoption of all-electric terminal trucks sets a new efficiency standard in the industry, offering quieter operation, smoother acceleration, and enhanced maneuverability. This is particularly important for Tire Rack, a company known for its commitment to delivering high-quality tires efficiently and reliably to customers across the country. Moreover, by prioritizing sustainable transportation solutions, Tire Rack underscores its commitment to corporate social responsibility, setting a positive example for the industry. This initiative showcases Tire Rack's dedication to environmental stewardship while maintaining its competitive edge in the tire distribution market.



Figure 1. Tire Rack IN Headquarters, Facility, and Track

## **AIR QUALITY BENEFITS**

The ZETD terminal truck replacement project will take place at Tire Rack's Distribution Center, located in South Bend, Indiana, which is located in St. Joseph County. Seen in Table 4, the St. Joseph County demographics underscore the critical need for air quality improvement in the region. All these factors make South Bend an excellent area to displace diesel emissions. As identified through the Climate & Economic Justice Screening Tool (CEJST), the local population is in the 75 percentiles of individuals living with asthma.

The EPA 2020 National Emissions Inventory shows that Indiana's NO<sub>x</sub> emissions are 678.6 tons, and the county is 24.1 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 St. Joseph County levels of diesel PM are higher, at 0.452 µg/m<sup>3</sup>. In terms of poverty level, the US census shows St. Joseph County stands at 13.2%, lower than the state average of 12.6%. Moreover, the percentage of children (18 and younger) in St. Joseph County is 23.0%, equaling the statewide figure of 23.0%. Additionally, the percentage of elderly (65+) in St. Joseph County, 16.9%, equal to the state average of 16.9%. Finally, considering the minority population, St. Joseph County shows a distinct proportion of 29.6%, compared to the state average of 23.0%.

**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 %
St. Joseph County	24.1	0.452	13.2	23.0	16.9	29.6
Indiana	678.6	0.388	12.6	23.0	16.9	23.0

In Table 5, the ZETD project emissions were calculated using the U.S. EPA Diesel Emission Quantifier (DEQ). Through the implementation of this project, approximately 23 short tons of NO<sub>x</sub> will not be emitted. As a result of this emission reduction, the negative health effects of exposure from NO<sub>x</sub> for people with asthma, children, and older adults, will not be exposed to as many harmful pollutants. 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</b> (short tons)	<b><u>NO<sub>x</sub></u></b>	<b><u>PM<sub>2.5</sub></u></b>	<b><u>HC</u></b>	<b><u>CO</u></b>	<b><u>CO<sub>2</sub></u></b>	<b><u>Fuel</u></b>
<b>Baseline for Upgraded Vehicles</b>	1.196	0.101	0.083	0.448	123.6	10,987
<b>Amount Reduced After Upgrades</b>	1.196	0.101	0.083	0.448	123.6	10,987
<b>Percent Reduced After Upgrades</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>LIFETIME RESULTS</b> (short tons)	<b><u>NO<sub>x</sub></u></b>	<b><u>PM<sub>2.5</sub></u></b>	<b><u>HC</u></b>	<b><u>CO</u></b>	<b><u>CO<sub>2</sub></u></b>	<b><u>Fuel</u></b>

<b>Baseline for Upgraded Vehicles</b>	23.927	2.018	1.652	8.952	2,472.1	219,740
<b>Amount Reduced After Upgrades</b>	23.927	2.018	1.652	8.952	2,472.1	219,740
<b>Percent Reduced After Upgrades</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>LIFETIME COST EFFECTIVENESS</b>	<b><u>NO<sub>x</sub></u></b>	<b><u>PM<sub>2.5</sub></u></b>	<b><u>HC</u></b>	<b><u>CO</u></b>	<b><u>CO<sub>2</sub></u></b>	<b><u>Fuel</u></b>
<b>Total Cost Effectiveness</b>	\$28,999	\$343,805	\$419,967	\$77,510	\$281	-

## ANTICIPATED OUTCOMES

As part of the Tire Rack overall sustainability and diesel emission reduction, this project will replace two diesel powered terminal trucks with a 2024 Orange EV e-TRIEVER all-electric terminal truck. The Orange EV e-TRIEVER terminal truck has a GCWR of 81,000lbs and a 180-kWh battery capacity. The Orange e-TRIEVER terminal truck is capable of 70kW charging rate and has an operating range of over 24 hours. Through replacement of the existing diesel-powered terminal trucks, this ZETD project is expected to displace 10,987 diesel gallons in the first year alone. Over the twenty-year life of this project, it is expected that over 219,740 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 the 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)	10,987	0
Volume of Diesel Displaced Annually (gallons)	0	10,987





## **LOCATION AND HOURS OPERATION**

This project is located at 7101 Vorden Parkway South Bend, Indiana. The facility houses the corporate headquarters for the entire Tire Rack company, as well as hosts the distribution operations for the midwestern United States. This facility operates 10 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, Tire Rack 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 IDEM/VW Advisory Committee and Tire Rack personnel to implement the following aspects of this project:

- Promoting diesel emission reduction projects, use policies, education and awareness programs with its employees.
- Celebrating and announcing the success of these projects with a press conference with IDEM

Tire Rack 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
Connor Edmonds	Tire Rack/Engineering & Facilities Director	574-287-2345	connore@tirerack.com
Ryan Lisek	Drive Clean Indiana/Project Manager	219-644-3690	rlisek@drivecleanindiana.org

## EVALUATION CRITERIA

The ZETD project addresses diesel emission reduction at a tire distribution that provides tire and vehicle products across the country. The location of this facility and the high activity of diesel engine terminal trucks make this a great location to deploy a zero-emission project that is industry proven. The need for heavy duty vehicle logistics is essential to the economic growth for the Crossroads of America. Being able to reduce the emissions from the supply chain for each consumable product that is manufactured or distributed at this facility has a national footprint for this project. Tire Rack is an Indiana company that has been in business for over 44 years.

## BUDGET

Table 8. Terminal Truck Replacement Project Budget Line Items			
Equipment	Units	2024 Indiana VW Settlement Funding – Final Round (75%)	Applicant Cost-Share Funds (25%)
2024 Orange EV E-TRIEVER (All-Electric, 180 kWh)	2	\$520,391.55	\$173,463.85
PROJECT GRAND TOTAL			\$693,855.40