

**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>	Round 2 - DERA Option Awards
<b>Beneficiary's Project ID:</b>	Round 2 - Indiana Pickling and Processing Diesel Locomotive Replacement
<b>Funding Request No.</b>	<i>(sequential)</i> 32
<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): <u>Grantee: Indiana Pickling and Processing Company as detailed in Attachment A</u>
<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 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): <b>Attached</b>
<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> <b>See Appendix D-4 Summary Details attachment.</b>	
<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> <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: 7/19/2021

  
\_\_\_\_\_  
[NAME] Bruno Rigott  
[TITLE] Commissioner  
Indiana Department of Environmental Management

\_\_\_\_\_  
[LEAD AGENCY]

for

State of Indiana

\_\_\_\_\_  
[BENEFICIARY]

## Appendix D-4 Summary Details

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

Category 10: DERA Option

### **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 one (1) 2020 model-year, or newer, U.S. EPA emission compliant (Tier 4) diesel-powered railcar mover to REPLACE one (1) of the Grantee's Pre-Tier 4 existing diesel-powered switcher locomotive that will be used for the same purpose. The replacement vehicle(s) will be located and operated in and around Portage, Indiana.

Diesel-powered railcar movers dramatically improve air quality and the quality of life conditions for drivers, 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 2.424 tons of nitrogen oxides (NO<sub>x</sub>) and 0.052 tons of fine particulate matter (PM<sub>2.5</sub>).

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

Over the lifetime of these trucks, U.S. EPA's DEQ model estimates this project will result in a NOx reduction of 2.424 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 25% of the total project cost while the Grantee and/or other programs covers the remaining 75%.

**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.

**Attachment B Details**

**Project Schedule and Milestones:**

Indiana announces Round 2 – VW DERA Option funding opportunity via online Request for Proposals (RFP)	October 1, 2020
Deadline for Round 2 – VW Onroad and Nonroad program applications	November 25, 2020
Indiana notifies applicants of award decisions	January 13, 2021
Funding Agreement between Indiana and Grantee is fully executed	February 24, 2021
Grantee project implementation	February 24, 2021 to September 30, 2022
Indiana reviews programmatic, financial, and vehicle scrappage 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	July 15, 2021
Indiana coordinates with Trustee on any questions or issues that arise related to the submitted Appendix D-4	July 15, 2021 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
The purchase, installation, operation and maintenance of one (1) 2020 model-year, or newer, U.S. EPA emission compliant (Tier 4) diesel-powered railcar mover that will REPLACE four (4) of the Grantee’s Pre-Tier 4 existing diesel-powered switcher locomotive that will be used for the same purpose. The replacement vehicle will be located and primarily operated in and around Portage, Indiana.	\$113,255.00	\$339,766.00	\$453,021.00
Percentage	25%	75%	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	\$6,842,290.22
3) State of Indiana's Net Remaining Allocation Prior to this D-4 Submittal	\$34,093,590.37
4) Current D-4 Funding Request Total	\$113,255.00
5) State of Indiana's Remaining Allocation After this D-4 Submittal	\$33,980,335.37

**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 3 years (2021 to 2023)</b>	\$6,140,382.09	\$2,046,794.03
<b>To Admin (3%) over 4 years (2020 to 2023)</b>	\$1,228,076.42	\$307,019.11
<b>To EMAs (82%) over 3 years (2020 to 2022)</b>	\$33,567,422.08	\$11,189,140.69



**Projected Trust Allocations:**

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
1) Anticipated Annual Project Funding Request to be paid through the Trust	\$11,189,140.69	\$13,235,934.72	\$13,235,934.72	\$2,046,794.03
2) Anticipated Annual Cost Share (Administrative Costs)	\$307,019.11	\$307,019.11	\$307,019.11	\$307,019.11
3) Anticipated Total Project Funding by Year (Line 1 + Line 2)	\$11,496,159.80	\$13,542,953.83	\$13,542,953.83	\$2,353,813.14
4) Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$3,895,454.40	\$2,845,636.82		
5) Current Beneficiary Project Funding to be paid through the Trust (Line 1)	\$101,199.00	\$113,255.00		
6) Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (Line 4 + Line 5)	\$3,996,653.40	\$2,958,891.82		
7) Beneficiary Share of Estimated Funds Remaining in Trust at Beginning of Year	\$40,935,880.59	\$36,939,227.19		
8) Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (Line 7 – Line 6)	\$36,939,227.19	\$33,980,335.37		

## 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**

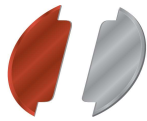
A. The Grantee shall implement and complete the Project in accordance with **Attachment A** and the plans and specifications contained in its Funding Application. Modification of the Project shall require prior written approval from IDEM. If IDEM determines that the Grantee is not making adequate progress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



**INDIANA PICKLING  
& PROCESSING COMPANY**

# Invoice

**6650 Nautical Drive, Portage, IN 46368**  
**Tel. (219) 787.8889 Fax: (219) 787.8834 www.feralloy.com**

**DATE:**  
5/26/21

**INVOICE #**  
**12049**

**Bill To:**

Mr. Shawn M. Seals  
 Senior Environmental Manager  
 Indiana Department of Environmental Management  
 Office of Air Quality - Mail Code 61-50  
 100 North Senate Avenue  
 Indianapolis, IN 46204-225

**Terms: Due Upon Receipt.**

DESCRIPTION	AMOUNT
RE: DOR2-006 Indiana VW Funding Agreement - Freight Switcher Replacement for (1) Replacement 2021 Tier-4 Final Diesel Railcar Mover	\$ 113,255.00
<p style="text-align: right;"><b>TOTAL</b></p>	\$ 113,255.00

USD

**THANK YOU FOR YOUR BUSINESS!**  
**WWW.FERALLOY.COM**

Project # 6

Location - 332

Capital Investment Invoice Approval and Inspection of Performance

Form Required For Each Purchase Order Each Payment

- 1. Company Name Voss Equipment
- 2. Service or Goods Purchased Track Mobile
- 3. Purchase Order Number 05443
- 4. Purchase Price \$ 350,000.00
- 5. Invoice Number 101192103
- 6. Amount of Invoice \$ 458,957.00 Before VW Grant Clearance
- 7. Previous Amount Paid to Date 0
- 8. Total Billing to Date \$ 458,957.00
- 9. Percent of Total Purchase Order Now Paid 100%
- 10. Payment Number 1 of 1
- 11. Detailed description of work completed since last inspection:

Titan Track mobile

- 12. What percentage of the purchase order do you feel has been completed? 100%
- 13. What percentage of the invoice should be paid? 100%
- 14. With whom did you meet? Jayne Bannerman - Voss
- 15. Do you have physical control? yes
- 16. EQUIPMENT/BUILDING IN SERVICE DATE 3-11-21
- 17. PROJECT CLOSED DATE 3-11-21

\$ 458,957.00 Account # 504 - 0 - 000 - 1661 - 01

\$ \_\_\_\_\_ Project # \_\_\_\_\_

\$ \_\_\_\_\_ Project # \_\_\_\_\_

\$ \_\_\_\_\_ Project # \_\_\_\_\_

\$ \_\_\_\_\_ Project # \_\_\_\_\_

Signed: [Signature]

Inspection Date: March 11<sup>th</sup>, 2021



Voss Equipment, Inc.  
15241 COMMERCIAL AVENUE  
HARVEY, IL 60426

# INVOICE

Invoice      Date      Customer  
**101192103**    **02/26/2021**    **102320**  
378401

Sold to :  
**INDIANA PICKLING AND PROCESSING**  
6650 NAUTICAL DRIVE  
PORTAGE, IN 46368

Shipped to :  
**INDIANA PICKLING AND PROCESSING**  
6650 NAUTICAL DRIVE  
PORTAGE, IN 46368

Terms : **NET 10 DAYS ACH**  
Notes :

*Concession made via Jayme Bannerman to push to 3-15-21*

Salesperson : Jayme Bannerman

Quantity	PMF Product - Description	Unit Price	Total Price
Order : C01098897      02/26/2021      Entered by : Dalene Cook Delivery : C01098897-1      02/26/2021      Shipping Method : Best Way <b>Cust PO# : M332-M18348</b> SALE OF EQUIPMENT 1 2021 Trackmobile - TITAN - TRACKMOBILE      453,021.00      453,021.00 S/N: 1008330121      Dealer ID: 1617688 FO - Freight - Out			
	Plate No: TITAN Approved By <i>[Signature]</i> Date <b>3-11-21</b> Meter 1      Ship Dt: 02/26/2021		5,936.00
	Vendor #		
	<b>MAR 11 2021</b>		
	G/L 504,000.00 (Total 0)	Amt. 458,957.00	
	G/L	Amt.	
	G/L	Amt.	

Due Date	Payment	Amount	Paid	Tax	Basis	Tax rate	Tax Amount
3/8/2021	On Account	458,957.00		Non-Taxable-Indiana	453,021.00	0.0000 %	0.00
	<b>If paid after 03/08/2021 pay</b>	<b>468,136.14</b>		Non-Taxable-Indiana	5,936.00	0.0000 %	0.00

Default: all line and item will payment



Total Amount :	458,957.00
Sales Tax :	0.00
Total :	458,957.00
Payment :	
To pay :	<b>458,957.00</b>
<b>If paid after 03/08/2021 pay</b>	<b>468,136.14</b>

Voss Equipment, Inc.  
P.O. Box 757  
Bedford Park, IL 60499-0757

Invoice    101192103  
Date      02/26/2021  
Customer    102320  
All amounts are in US Dollars (\$)

Accounts over 30 days are subject to a 1.5 % service charge (annual rate 18 %) and all costs of collection including reasonable attorney's fee



15241 South Commercial Avenue, Harvey, Illinois 60426

Phone 708-596-7000 Fax 708-596-6791

www.vossequipment.com

sales@vossequipment.com

ISO 9002

*Material Handling  
Equipment*

## **ACH TRANSFER INSTRUCTIONS**

### **Credit to Voss Equipment, Inc.:**

**Account Name: Voss Equipment, Inc.**

**Depository: First Midwest Bank, N.A.  
12015 S. Western Avenue  
Blue Island, IL 60406  
Phone: 708-389-9400**

**ABA # 071901604**

**Account #: 07045065**

**\*\*Please send remittance information to:**

**ar@vossequipment.com**



# Purchase Order

Indiana Pickling & Processing  
 6650 Nautical Dr  
 Portage, IN 46368  
 Phone Fax

The following numbers must appear on all related  
 correspondence, shipping papers, and invoices

P.O. Number PO-05443  
 Accounting  
 Job #

To: Voss Equipment  
 15241 South Commercial Avenue  
 Harvey, IL 60426

Ship To: Indiana Pickling & Processing  
 6650 Nautical Dr  
 Portage, IN 46368

PO Date	Exp Delivery	Requisitioner	Shipping Via	Terms
2/24/2021	no mapping	Mike Kemp		See Attached

Qty	Unit	Unit Description	Unit Price	Unit Total
1		New Tier IV Cummins Engine Titan Trackmobile Per Quote # JBTITANTMGRANT-111020	\$453,021.00	\$453,021.00

Terms:  
 Pay:  
 Frt Pay:  
 Shipped Via:  
 Delivery:

Sub Total	\$453,021.00
Sales Tax	\$0.00
Shipping	\$5,936.00
Other	\$0.00
Total	\$458,957.00

Notes: CAPITAL

Mike Kemp 2/24/2021

Authorized by Mike Kemp Date

\*This PO was signed electronically



3/11/21

ACH PAYMENT REMITTANCE ADVICE FROM FERALLOY CORPORATION

RPT51ACH

\* \* \* PAID TOTAL \* \* \* 458,957.00 3/11/2021 Payment Reference: 2316

VOSS EQUIPMENT  
PO BOX 757

02634 AR@VOSSEQUIPMENT.COM

PAGE: 00001

BEDFORD PARK IL 60499-0757

Invoice Date	Invoice Number	Division	Gross Amount	Discount Amount	Net Amount
2/26/2021	101192103	IPPC	458,957.00	.00	458,957.00

**2020 DieselWise Indiana – DERA with Volkswagen DERA Option  
Port Freight Switcher Replacement Project  
Narrative Work Plan**

**Scoring Criteria Summary**

- I. Cost effectiveness of project (\$ per ton of NO<sub>x</sub> reduced).**  
-This cost effective project has a value of \$12,458 per NO<sub>x</sub> ton reduced.
- II. Transformational potential.**  
-This project will have immediate positive impact to the direct quality of life. This project addresses the use of one of the largest harmful emission producers at Port of Indiana – Burns Harbor.
- III. Project's total NO<sub>x</sub> emission reduction potential (based on type of project and/or the use of vehicle).**  
-This project has ability to reduce one of the largest amount of NO<sub>x</sub> emission reductions thus far based upon the longevity and use of this freight switcher locomotive.
- IV. National Ambient Air Quality Standards (NAAQS) sensitive areas as a percentage of current standards.**  
-This project is taking place in Porter county, where this county is still listed as nonattainment.
- V. Air quality benefits to areas with sensitive populations or that bear a disproportionate share of the air pollution burden.**  
-Due to the location of this project located at the Port of Indiana – Burns Harbor, this will have an immediate impact on asthmatic population.
- VI. Leveraging of Resources (financial or resource match).**  
-All cost share funds will come from Indiana Pickling. Indiana Pickling plans to provide 75% of cost share for this project.
- VII. Entities registered with the Indiana Secretary of State that operate vehicles and equipment in conjunction with Indiana facilities (include Indiana Economic Impact documentation).**  
-Yes. Please see attached documentation.
- VIII. Active participant in the State of Indiana, Department of Administration or Department of Transportation Minority/Women/Veterans Business Enterprise Participation Plan.**  
-No.

**2020 DieselWise Indiana  
DERA with Volkswagen DERA Option  
Port Freight Switcher Replacement Project  
Narrative Work Plan**

**PROJECT TITLE:** Port Freight Switcher Replacement Project

**SOLICITATION:** 2020 DieselWise Indiana – DERA with Volkswagen DERA Option

**CATEGORY:** Nonroad Equipment Replacement  
Clean Diesel (Tier-4 Final) Replacement

**GRANTEE INFORMATION:** Jason Hudson, Plant Manager  
Indiana Pickling & Processing Company  
jhudson@feralloy.com  
Portage, IN 46368  
Phone: (219) 836-3917

**CONGRESSIONAL DISTRICT:** (1) – Congressman Peter Visclosky

<b>Table 1: General Fleet Information<sup>1</sup></b>	
Number of Vehicles/Equipment to Replace	1
Annual Hours Usage	2,612 hours
Current Equipment Information	1949 EDM SW-1 Freight Switcher Locomotive
Engine Model Year	1960 (Unregulated)
Engine Horsepower	600 Horsepower
Monthly Fuel Consumption	2,094 gallons
Estimated Average Use Per Year	260 days
Estimated Monthly Idle Time	68 Hours a month
Estimated Monthly Use	218 hours a month
New Vehicle/Equipment Make	2021 Trackmobile Titan (Tier-4 Final, 260 HP)
New Vehicle Model Year	2020
Estimated Years to Remain in the Active Fleet	15 years

**FUNDING REQUESTED:** \$113,255.25

**TOTAL PROJECT COST:** \$453,021.00

<b>Table 2: Budget Summary</b>			
Source	Type	Amount	Cost Share
2020 DieselWise Indiana Funding	Grant	\$113,255.25	25%
Applicant Share – Indiana Pickling	Cash	\$339,765.75	75%
<b>Total</b>			<b>\$453,021.00</b>

**PROJECT PERIOD:** January 15, 2021 – September 30, 2022

**GENERAL FLEET BACKGROUND:**

<sup>1</sup> Breakdown of each vehicles is provided in Attachment IV - Indiana Fleet Data Spreadsheet

Indiana Pickling & Processing Company (Indiana Pickling) is located in Portage, Indiana at the Port of Indiana-Burns Harbor location. This location is ideal for steel coil production and logistics with easy access to rail, truck, barge and ocean vessels in close proximity within Burns Harbor. This 155,000 square foot building is a full service toll processor and hydrochloric acid pickling facility that also offers indoor steel coil storage. The backbone of operations at Indiana Pickling requires an engine powerful enough to transport four loaded steel coil rail cars into the facility every work day. As with many intermodal rail logistics operations, Indiana Pickling has utilized an Electro-Motive Division (EMD) SW-1 freight switcher locomotive for these operations.

On average, there are 32 coils transported by this freight switcher which would take 16 semi-trucks with flatbed trailers to complete this process. Though this 1949 freight switcher was manufactured 71 years ago, it is well maintained and utilized daily. The 600 horsepower, 567A engine was remanufactured in 1960. Over the years, this engine has been rebuilt time and time again. This 98-ton freight switcher is water cooled and burns through diesel fuel at a rate of 9.61 gallons an hour. Due to the engine being water cooled, this freight switcher engine must idle in order to prevent the coolant from freezing. If the engine would freeze, the entire operations of Indiana Pickling would be placed on hold until the engine is rebuilt and repaired. In order to maintain operations in the winter and keep the engine from not freezing, this freight switcher must idle until operations are completed for the day and then it is stored inside.



(Current 1949 EMD SW- Switching Locomotive)

The operations of Indiana Pickling's freight switcher involve transporting loaded rail cars around the Port of Indiana – Burns Harbor. Usually, the freight switcher is either hauling raw steel coils from the mills to go through the pickling and toll process to meet customer specifications or placing rail cars with steel coils that have completed the process and then transported by a class 1 railroad. The logistics of steel coil manufacturing and processing requires heavy duty equipment to complete this process. Unfortunately, heavy duty equipment is powered by high horsepower diesel engines that can easily supply the torque needed to move four 100-ton rail cars.

There are only a couple of options that are available to meet the operations of the current 600 horsepower rail car mover. Indiana Pickling was approached by South Shore Clean Cities (SSCC) to take part in the port emissions inventory that is an initiative to reduce greenhouse gas and other emissions at the Port of Indiana. It was through this partnership, that SSCC was able to identify opportunities and solutions that provide the best emission reduction outcome, while maintaining operational function of the current freight switcher locomotive. SSCC was able to demonstrate a Trackmobile Titan rail car mover on November 6, 2020. The Trackmobile Titan was able to provide the same functionality and operations on the four, 100-ton rail cars on the same track that Indiana Pickling operate their freight switcher locomotive.

Indiana Pickling requests funding for one Trackmobile Titan railcar mover, that will replace an existing 1949 diesel freight switcher locomotive that has an engine model year of 1960.

The 2021 Trackmobile Titan was chosen based on dependability and uptime that has been experienced by other rail companies. The Trackmobile Titan is equipped with a plug-in block heater that can utilize any 110-volt outlet, which will reduce engine idling significantly. The 2021 Trackmobile Titan is powered by a Cummins QSB 6.7-liter engine that EPE Tier 4-Final regulations with the EPA. The average diesel gallons consumed by other Trackmobile Titan's is 1.4 gallons per hour, which will be an immense reduction in diesel usage.

## **PROJECT DESCRIPTION:**

As part of the Environmental Protection Agency (EPA) Region 5 – Port of Indiana & Port of Detroit Focus, SSCC has partnered with tenants at the Port of Indiana to conduct emission inventories and equipment audits. It was through this relationship that SSCC had identified a large emitter at Indiana Pickling's operations. Through Indiana Pickling's efforts to reduce diesel emissions and overall commitment to innovation and sustainability, this project will replace one unregulated emission diesel freight switcher locomotive with a new EPA Certified Tier – 4 Final engine powered rail car mover. This clean diesel rail car mover will significantly reduce diesel emissions and greenhouse gas emissions at the Port of Indiana – Burns Harbor over the life of this piece of equipment.



(Current 1949 Unregulated Freight Switcher)

Engine replacement, certified engine remanufactures, and idle reduction technologies were considered in the decision-making process before arriving at replacing this freight switcher locomotive with a clean diesel rail car mover as the best solution for Indiana Pickling. Engine replacement was not a cost-efficient option because of the controls and added computers needed to update the 1949 freight switcher. There was not an EPA certified engine remanufacture option for this freight switcher locomotive. Idle reduction technologies were explored, however idle reduction only identified the idling that goes on during the winter. The idle reduction doesn't address the emissions that are still pouring out of this unregulated 600 horsepower engine while in operation throughout the year. Replacing the freight switcher locomotive with a Trackmobile Titan addresses the immediate benefit of Tier 4-Final emissions, engine idle reduction, and a piece of equipment with half the horsepower that still can complete all the existing operations of the previous freight switcher.

If approved for an award, Indiana Pickling will order the Trackmobile Titan after grant agreements have been received from IDEM. Delivery of the new Trackmobile will take approximately 90 days from the date of the purchase order. Training of the staff will take place when the equipment is delivered. Indiana Pickling operators have already validated the proposed equipment from a demonstration provided by SSCC and the local Trackmobile vendor. Indiana Pickling commits to scrapping, rendering original engine permanently disabled by forcing a 3 x 3 inch hole in the side of the exiting freight switcher locomotive's engine. Indiana Pickling will secure and submit a certificate of evidence of appropriate disposal. Indiana

Pickling will also provide necessary quarterly and final reports to the program. Below is the project approach, broken out by tasks, along with the estimated timeline:

**Table 3: Project Timeline and Milestones**

Activity	2021												2022								
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Grant Award	X	X																			
IN Contracts Agreement		X	X																		
Place Order of Clean Diesel Railcar Mover			X	X																	
Rail Car Manufacturing/Shipping				X	X	X															
Clean Diesel Railcar Mover Delivery							X	X													
Indiana Pickling Staff Training								X	X												
Old Engine Destruction and Certification									X	X											
Quarterly Reports				X				X				X				X				X	
Vendor/Equipment Payment											X										
Request for Reimbursement												X									
Marketing & Outreach														X	X	X					X
Final Report																					X

Air Quality Benefits

The Port Freight Switcher Replacement Project is conducted at the Port of Indiana – Burns Harbor, which is located in Porter County, IN. Porter County is on the U.S. Environmental Protection Agency’s National-Scale Air Toxics Assessment list, meaning all or part of the population is exposed to more than 2.0 ug/m3 of diesel particulate matter emissions. Porter County, IN is also part of the Environmental Protection Agency’s 2020 National Priority Area.

U.S. Census Bureau data indicates 8.9 percent of Porter County residents live in poverty, compared to the 10.5 percent national average.

All of these residents fall under the sensitive populations category for air pollutants. The Centers for Disease Control and Prevention National Environmental Health Tracking Network shows 14.4 percent of Indiana adults have asthma compared to 7 percent at the national level.

The designation on the U.S. Environmental Protection Agency’s National-Scale Air Toxics Assessment list coupled with high poverty levels in Porter County, higher-than-average adult asthma rates, sensitive populations and minority populations make Porter County an excellent location for a project such as this.

In the chart below, the project emissions were calculated utilizing the U.S. EPA’s - DEQ. Through the implementation of this project, approximately 9.617 short tons of NO<sub>x</sub> will be taken off the road within the first year. 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 these harmful emissions. In consideration to the other emissions quantified from the DEQ, almost all emissions and criteria air pollutants are reduced by at least 56 percent.

**Table 4: Indiana Pickling – Port Freight Switcher Replacement Project  
Estimated Annual Emissions Reductions**

*Data was used utilizing the most current U.S. EPA Diesel Emission Quantifier*

<b><u>Annual Results</u></b> <i>(short tons)</i>	<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>
Baseline for Upgraded Vehicles	2.486	0.053	0.144	0.261	282.7	25,125
Amount Reduced After Upgrades	2.424	0.052	0.139	0.148	241.5	21,468
Percent Reduced After Upgrades	97.5%	98.8%	96.6%	56.7%	85.4%	85.4%
<b><u>Lifetime Results</u></b> <i>(short tons)</i>	<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>
Baseline for Upgraded Vehicles	37.295	0.793	2.165	3.922	4,239.8	376,875
Amount Reduced After Upgrades	36.363	0.784	2.091	2.224	3,622.7	322,020
Percent Reduced After Upgrades	97.5%	98.8%	96.6%	56.7%	85.4%	85.4%
<b><u>Lifetime Cost Effectiveness</u></b> <i>(\$/short ton reduced)</i>	<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>Total Cost Effectiveness</b> (includes all project costs)	\$12,458	\$578,170	\$216,629	\$203,695	\$125	

### Anticipated Outcomes

As part of Indiana Pickling’s efforts to reduce diesel emissions and overall commitment to innovation and sustainability, this project will replace one 1960 pre-tier emission diesel freight switcher locomotive mover with a new 2021 Tier-4 Final rail car mover. The new clean diesel railcar mover is powered by a Cummins 260 horsepower engine and has an industry average of 1.4 gallons per hour of diesel consumption. Based upon current operation, it is estimated that this will reduce fuel consumption by 85% annually or 21,468 gallons.

Additionally, fuel consumption will be reduced because of the decrease in engine idling conducted due to the Trackmobile Titan’s plug-in block heater. It is estimated that this will reduce engine idling by 800 hours a year. This project will provide the example for other port clients to right size their current outdated equipment with newer and efficient technologies that can still meet the demands of current heavy-duty operations.

### Metrics

Adequate diesel fueling and electric 110-volt outlets currently exist for Indiana Pickling. The key performance metrics of this project are centered on hours of operation and the amount of diesel fuel displaced through this clean diesel rail car mover project. The new Trackmobile’s block heater will be able to be plugged in inside or outside.



**Table 5: Anticipated Target Metrics**

<b>Performance Measures:</b>	<b>Current (2020)</b>	<b>Target (2021)</b>
Volume of diesel used annually (diesel gallon equivalents)	25,125	3,657
Volume of diesel displaced annually (gallons)	0	21,468

Location and Hours of Operation

The Indiana Pickling facility is located at 6650 Nautical, Portage, IN 46368; which is located in the Port of Indiana – Burns Harbor. Indiana Pickling is in operation six days a week with 24 hour shifts during the week, and operating between eight hour shifts on the weekend. On average, Indiana Pickling’s current freight switcher locomotive moves between 200-250 railcars a month. Normal operations include loading and unloading railcars with steel products. Each car takes at least two hours to clean, inspect, unload, load and send out.



(Steel Coil Pickle Processing)

The current 1960 unregulated freight switcher is in operation 6 days a week moving railcars in and out of the Indiana Pickling facility. On an annual average, the current railcar operates 2,612 hours per year and consumes 25,125 gallons of diesel annually. The freight switcher experiences intense engine idle time as the result of the operation during the winter months. On average, the current freight switcher idles 817 hours annually. This is due to the fact that the 600 horsepower must remain on in order to keep the freight switcher from freezing.

**Table 6: Indiana Pickling Tonnage for 2019**

<b>Steel Movement:</b>	<b>2018 Statistics</b>
Annual Tons In	1,036,029
Annual Tons Out	1,020,620
Trucks in Per Month	2,220
Trucks Out Per Month	2,400
Railcars In Per Month	200
Railcars Out Per Month	190

The Indiana Pickling facility supports the logistics of steel coil between the steel mills in northern Indiana then transportation by railcar or truck. The Indiana Pickling facility has rail access and freight equipment to support the lifting steel coil logistics. In order to move the steel coils by railcar or truck, the team at the Indiana Pickling facility utilizes cranes that are powered by an all-electric hot wire. This further shows the commitment to sustainability from a warehouse perspective that has instituted alternative fueled equipment that can meet the power that is normally that of heavy-duty diesel equipment.

Grantee Partners and Roles

South Shore Clean Cities (SSCC) 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 SSCC 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. SSCC is a SmartWay Affiliate Partner and will commit 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, Indiana Pickling personnel will also work with SSCC 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 railcar mover once it is deployed. In addition to tracking performance and estimated reduction in tailpipe emissions, 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.

South Shore Clean Cities will also work with IDEM/VW Advisory Committee and Indiana Pickling personnel to implement the following aspects of this project:

- Promoting diesel emission reduction projects and use policies and education and awareness programs with its employees.
- Celebrating and announcing the success of these projects with a press conference with IDEM.
- Indiana Pickling is a member of the Indiana Green Fleet Program which promotes partnerships and 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

The contacts below will serve as liaisons with the 2020 DieselWise Indiana staff and other Indiana Pickling staff on this project.

**Table 7: Project Contacts**

Contact	Organization/Title	Phone	Email
Jason Hudson	Indiana Pickling & Processing Company/Plant Manager	219-836-3917	<a href="mailto:jhudson@indianapickling.com">jhudson@indianapickling.com</a>
Ryan Lisek	South Shore Clean Cities/Project Manager	219-644-3690	<a href="mailto:rlisek@southshorecleancities.org">rlisek@southshorecleancities.org</a>

### Evaluation Criteria

Indiana Pickling is steel manufacturing company that specializes in the movement of steel coils from the Port of Indiana – Burns Harbor to the end user. The majority of Indiana Pickling’s clients support the automotive, recreational vehicle, and heavy-duty industry. A good example of how this project supports a positive economic impact is through the perspective of the engine manufacturing leader, Cummins. At the engine manufacturing facilities in Seymour, IN; Cummins needs steel for the leading component in order to produce engines parts. Cummins and other steel processors utilize the steel that is produced in order to produce engine components that are driven and operated by Americans across the country.

The Port Freight Switcher Replacement Project is combination of Indiana based companies strategically working in cooperation to operate more efficiently while improving overall economy in Indiana. According to Indiana.gov, 724 million tons of freight travel through Indiana, making it the fifth busiest state for commercial freight traffic. As the Crossroads of America, the emittance from onroad sources is directly addressed through this project.

Indiana is the largest steel producing state in the country, and much of the state economy has a correlation to the manufacturing of steel in the hoosier state. The data in Table 8 was taken from a study that was published by the American Iron and Steel Institute.

**Table 8: Indiana Steel Impact<sup>2</sup>**

Direct Impact	<u>Jobs</u>	<u>Wages</u>	<u>Industry Output</u>
Material/Mill Services	3,442	\$294,689,000	\$1,796,517,100
Iron and Steelmaking/Steel Mill Products	22,410	\$2,593,517,700	\$20,379,103,800
Other Steel products/Processing/Distribution	11,797	\$919,754,000	\$4,641,494,900
<b>Total Direct Impact</b>	<b>37,649</b>	<b>\$3,807,960,700</b>	<b>\$26,817,115,800</b>
<b>Total Supplier Impact</b>	<b>67,895</b>	<b>\$4,528,958,700</b>	<b>\$15,171,796,900</b>
<b>Total Induced Impact</b>	<b>86,570</b>	<b>\$4,054,863,600</b>	<b>\$13,365,690,900</b>
<b>Total Economic Impact</b>	<b>192,114</b>	<b>\$12,391,783,00</b>	<b>\$55,900,603,600</b>

The economic impact that is associated with steel industry has a figure of almost \$56 billion. The Port Freight Switcher Replacement Project combines the production, transportation, and manufacturing of steel. More specifically this project is a collaboration between Lake and Porter County Indiana, Indiana Pickling, and heavy-duty manufacturing plants like Cummins to provide jobs and positive economic impact in the state of Indiana.

<sup>2</sup> Dunham, J., & Associates. (2018). "The Economic Impact of the American Iron and Steel Industry"

Indiana’s role as the largest steel producing state relies heavily on the use of heavy-duty vehicles to supply adequate logistics. For the most part, the state of Indiana relies on the Port of Indiana – Burns Harbor for the transportation of the steel that is used to manufacture the necessary equipment, to provide jobs, and keep manufacturing within the United States.

The Port Freight Switcher Replacement Project is transformational due to the fact that this project is replacing one of the dirtiest, oldest pieces of equipment being operated at the Port of Indiana – Burns Harbor. This project will set the standard for ports across the nation that want to reduce emissions while keeping up with the high demand of goods movement at the port.

Project Budget and Applicant Commitment

Indiana Pickling is prepared to leverage funding toward this project to reach a successful deployment of one Tier 4-Final railcar mover and to support the Indiana Department of Environmental Management’s emissions reductions efforts through the 2020 DieselWise Indiana – DERA with Volkswagen DERA Option. See attached cost-share commitment letter for further proof of commitment.

As part of Indiana Pickling’s efforts for cleaner operations, there is significant investment needed to further changeover the fleet to a more efficient, cost-effective option. Indiana Pickling needs to secure the support via DieselWise funding in order to move forward with the vehicle procurements. Indiana Pickling can continue to operate and maintain the current freight switcher for another 71 years, if needed. This project would not be able to implemented without outside funding.

<b>Table 9: Project Budget Line Items</b>				
<b>Equipment</b>	<b>Units</b>	<b>2020 DieselWise Funding (25%)</b>	<b>Applicant Cost-Share Funds (75%)</b>	<b>Total</b>
2021 Trackmobile Titan	1	\$113,255.25	\$339,765.75	\$453,021.00
<b>PROJECT GRAND TOTAL</b>	<b>1</b>	<b>\$113,255.25</b>	<b>\$339,765.75</b>	<b><u>\$453,021.00</u></b>

ATTACHMENTS

- I. Automated Direct Deposit Authorization Agreement State Form 47551
- II. Indiana Economic Impact – Proposals and Contracts - State Form 51778
- III. Letters of Cost Share Commitment
- IV. Equipment Quotes
- V. Indiana Fleet Data Spreadsheet (Attached in email)