

APPENDIX D-4
Beneficiary Eligible Mitigation Action Certification

ATTACHMENT B

Eligible Mitigation Action Management Plan, Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4)

**Project Management Plan
Project Schedule and Milestones**

Milestone	Date
US EPA approval of Ohio DERA FFY2017 state clean diesel allocation funding for the project. Workplan was approved in June, 2017.	CY 2017 Q3
Project included in Ohio EPA draft VW Beneficiary Mitigation Plan released for public comment, 12/8/17	CY 2017 Q4
Execution of initial grant contract between Ohio EPA and The Great Lakes Towing Company 2/7/18, authorization to proceed.	CY 2018 Q1
Company submits scope change request to US EPA and Ohio EPA to change technology on three of the four new tugboats. Construction underway on first new tugboat.	CY 2018 Q1
Project with scope change is included in Ohio Beneficiary Mitigation Plan filed with VW Trustee 5/31/2018	CY 2018 Q2
US EPA approval of Ohio DERA FFY2018 state clean diesel allocation funding for the project. Workplan was approved in June, 2018.	CY 2018 Q3
Execution of amended grant contract between Ohio EPA and The Great Lakes Towing Company increasing the amount of project funding, 7/12/18	CY 2018 Q3
Ohio EPA presents project to Controlling Board of Ohio General Assembly with request for spending authority, 8/6/18. Work is underway on all four new tugboats.	CY 2018 Q3
Company submits first invoice for equipment and labor for work underway on first two new tugboats (Hulls 6502 and 6503), 10/1/18.	CY 2018 Q4
Controlling Board of the Ohio General Assembly approves DERA and VW spending authority for the tugboat project, 10/15/18.	CY 2018 Q4
Ohio EPA approves first project invoice, paid with \$345,458 in DERA funding 10/23/18	CY 2018 Q4
First new tugboat (Hull 6502) is registered as the tug <i>Ohio</i> and launched for sea trials. Old tug <i>Ohio</i> is delivered to the National Museum of the Great Lakes in Toledo for alternate disposition and conversion to an exhibit. Lead and asbestos remediation underway on second tug prior to engine decommissioning. Construction underway on second and third new tugs (Hulls 6503 and 6504), and steel and equipment ordered for the fourth new tug (Hull 6505)	CY 2018 Q4
Ohio EPA conducts site visits to the Great Lakes Shipyard in Cleveland to observe new tug construction 2/4/19 and old tug engine decommissioning 2/12/19.	CY 2019 Q1
Ohio EPA gives public presentations about the project to Midwest Clean Diesel Initiative at US EPA Region 5 in Chicago 4/25/19 and Green Marine GreenTech conference in Cleveland 6/6/19. Company submits second invoice for equipment and labor underway on three tugboats. Ohio EPA approves \$459,024 payment with remaining DERA funds for equipment and	CY 2019 Q2

labor underway on three remaining tugs. New tug <i>Ohio</i> christened and old tug <i>Ohio</i> dedicated as exhibit at National Museum of the Great Lakes in Toledo 6/21/19.	
Ohio EPA submits D-4 request for the project to VW Trustee. Second tug <i>Michigan</i> to be christened at the Great Lakes Shipyard in Cleveland 7/22/19. Work continues on construction of third and fourth new tugs, and engine decommissioning on old tugs. First reimbursement of project expenses from VW funds.	CY 2019 Q3
Work completed, anticipated launch and invoice submittal on third new Tug <i>Pennsylvania</i> . Work continues on fourth new tug, and engine decommissioning.	CY 2019 Q4
Work continues on fourth new tug, and engine decommissioning.	CY 2020 Q1
Work to be completed with anticipated launch of fourth new tug, engine decommissioning completed and invoice submittal	CY 2020 Q2
All project work completed.	CY 2020 Q3
Ohio EPA reports to Trustee on status of and expenditures with Mitigation Actions completed and underway	Within 6 months of first disbursement; January 30 and July 30 thereafter

PROJECT BUDGET

	Period of Performance for Great Lakes Towing project V18F-001: January 2018 – December 2020			
Budget Category	Total Approved Budget	Share of Total Budget to be Funded by the Trust	Share of Total Budget to be Funded from OH DERA funds	Cost Share, Paid by Vessel Owners
Equipment Expenditure (100% of engine components for 4 vessels in Approved DERA FFY2017 workplan)	\$3,707,792	\$1,098,533	\$384,332	\$2,224,927
Equipment Expenditure (100% of additional/alternative engine components for 3 of the four vessels in Approved DERA FFY2018 workplan) after US EPA approved modification to use a different diesel electric hybrid technology for these three vessels	\$1,870,110	\$328,650	\$418,260	\$1,123,200
Reallocation of \$1,890 in unspent DERA FFY17 funds from another project were reallocated to the tugboat project when US EPA approved Ohio's FFY18 DERA workplan	\$1,890		\$1,890 unspent DERA 2017 funds reallocated to the tugboat project in Ohio's FFY18 DERA workplan.	
Additional allocation in 2020 to cover unanticipated costs for modification of the hulls of three of the tugboats.	\$1,412,126	\$564,850	0	\$847,276
Contractor Support	\$0	\$0	\$0	\$0
Subrecipient Support	\$0	\$0	\$0	\$0

Administrative Previous ¹	\$99,903	\$99,903	\$0	\$0
Administrative new	\$39,539	\$39,539	\$0	\$0
Project Totals	\$7,131,360	\$2,131,475	\$804,482	\$4,195,403
Percentage	100%	30%	11%	59%

¹Subject to Appendix D-2 15% administrative cap. Ohio BMP caps administrative at 7%.

PROJECTED TRUST ALLOCATIONS

	2019	2020	2021
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$1,427,183 for tugs and ferries, plus \$99,903 admin totals \$1,527,086	\$564,850 for tugs and ferries plus \$39,539 admin totals \$604,389	
2. Anticipated Annual Cost Share	\$3,348,127 by Tug company plus \$804,482 DERA funds totals \$4,152,609	\$847,276 new cost share by Tug company	
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$5,679,695	\$1,451,665	
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$10,700,000	\$17,606,914	
5. Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$1,527,086	\$604,389	
6. Total Funding Allocated to Beneficiary, including of Current Action by Year (line 4 plus line 5)	\$12,227,086	\$18,211,303	
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$64,602,522.67	\$57,695,609	
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Actions (line 7 minus line 5)	\$63,075,436.67	\$57,091,219	

ATTACHMENT C
Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11)

The Ohio Environmental Protection Agency will provide detailed reporting on this Category 4 tugboat engine replacement project in two ways:

- (1) Timely updates to Ohio EPA's Volkswagen Mitigation Grant webpage, <https://epa.ohio.gov/oeo/#131365122-vw-mitigation-grants>; and
- (2) Ohio's semiannual reporting obligation to Wilmington Trust (the "Trustee").

Ohio EPA maintains a VW Environmental Mitigation Trust specific webpage that has been designed to support public access and limit burden for the public. The Agency is committed to maintaining and making publicly available all documentation submitted in support of the funding requests and all records supporting all expenditures of Eligible Mitigation Action funds, subject to applicable laws governing the publication of confidential business information and personally identifiable information. Ohio EPA is subject to Ohio public records requirements in [chapter 149 of the Ohio Revised Code](#), and also to requirements in [Ohio Revised Code Section 125.112](#) that state agencies post all grant awards above \$25,000 on a public-facing website. These laws outline best practices for public access to records, and exemptions in the case of confidential business information and personally identifiable information meeting exemption criteria under the Ohio Public Records Law.

None of the information requested or received by Ohio EPA in the Diesel Mitigation Trust Fund grant program meets the criteria under Ohio law for a trade secret exemption. To the limited extent information is submitted to Ohio EPA that meets exemption criteria under Ohio public records law, Ohio EPA will maintain that information as confidential.

To facilitate public record and file review requests, Ohio EPA is preparing the selected grant applications for posting to the Agency's online searchable eDocument database at <https://epa.ohio.gov/dir/publicrecords#lt-112012639-edocument-search>. All documentation submitted by grant recipients in support of the funding requests and all records supporting all expenditures of Eligible Mitigation Action funds will be posted to this searchable eDocument database, subject to applicable laws governing the publication of confidential business information and personally identifiable information. Records will be retained until the termination date of the Environmental Mitigation Fund or by retention schedules determined by the State Records Program under [Ohio Revised Code section 149.333](#), whichever is longer.

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

ATTACHMENT D

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

Tug Boat Replacement Project

Grant Applicant	New Tug Fuel Type	Number of Tugs	Quoted New Tug Cost	Awarded New Tug Cost and %
The Great Lakes Towing Company DERA FFY2017	diesel electric hybrid	4	\$926,791 (engine components only)	\$370,716 (40% of engine components, to be split between Trust and DERA funds.)
The Great Lakes Towing Company DERA FFY2018	Modification of diesel electric hybrid system	(3 of the four tugs above)	Additional \$623,370 per tug for more expensive engine components after modification was approved.	\$249,348 (40% of incremental cost increase to engine components, to be split between Trust and DERA funds)
The Great Lakes Towing Company 2020	Diesel electric hybrid system	(3 of the four tugs above, hull modifications)	\$1,412,126 for modifications to 3 tugs, or \$470,709 per tug	\$564,850 for 40% of modification costs for 3 tugs, or \$188,283 per tug

Grant applicant Great Lakes Towing provided quotes from vendors and installers of the various engine components. These price quotes will soon be posted with each selected grant application to Ohio EPA's online searchable eDocument database at <https://epa.ohio.gov/dir/publicrecords#lt-112012639-edocument-search>.



THE GREAT LAKES TOWING COMPANY
GREAT LAKES SHIPYARD

4500 Division Avenue • Cleveland, Ohio 44102
(216) 621-4854 • www.thegreatlakesgroup.com

November 4, 2019

Ms. Carolyn Watkins
Chief, Office of Environmental Education
Administrator, Ohio Environmental Education Fund
Administrator, Diesel Emission Reduction Grants
Ohio Environmental Protection Agency
50 West Town Street, Suite 700
Columbus, Ohio 43215

**Ref: Ohio Federal Diesel Grant Agreement SFY 2018
Ohio EPA Grant Number V18F-001**

**Subject: Diesel Emission Reduction Grant Supplement
Financial Support Request for Successful Completion
Tugboat Fleet Upgrade Program**

Dear Ms. Watkins:

As we have recently discussed, the cost of the new propulsion systems being installed in the environmentally friendly tugs being built by The Great Lakes Towing Company has unexpectedly exceeded original estimates, primarily due to originally unforeseen costs required to convert from conventional propulsion to the new technology in the hybrid propulsion and power generations systems being used. Therefore, we are herein requesting additional financial support to make-up for the shortfall and successfully complete the 4-tug program.

The upgrade from conventional to hybrid propulsion will allow for more than a 55% improvement (decrease) in NOx emissions, with the use of hybrid motor generators in lieu of diesel main engines. These are the first hybrid systems of their kind to be installed in a Damen-designed tugboat, and the degree of complexity integrating the machinery, equipment and control systems was largely misunderstood and underestimated by our vendors (Logan Clutch, Canal Marine and W.W. Williams/Twin Disc Inc.), as well as by our own engineering and production management team.

The design changes entailed significant research and development, trial and error testing, and extraordinary additional commissioning costs to accurately program the logic controllers and settings to establish the vessel operating modes the system was designed for. Installation of the hybrid system also required a redesign of the vessel's general arrangement, including critical interior structural bulkheads, to accommodate the new gear boxes, the hybrid motor generators, and electrical panels. Additional complications impacting costs also included special software customization to allow for seamless operation of the new electric drive systems.

Ohio Environmental Protection Agency

November 4, 2019

Page 2

The scope and complexity of the R&D, vessel redesign, and power system installation for Hull 6502 (Tug OHIO) increased our costs more than 45%, above and beyond the amount originally budgeted DERA grant award amount. Instead of the originally estimated cost of \$926,970, the actual power generation system cost for this tug was \$1,367,219; an increased cost of \$440,429. Based upon the 40% cost share formula, the Ohio EPA's DERA grant for the Tug OHIO should, therefore, be increased by \$176,171 (40% of the \$440,429 increased cost); and, thus, we hereby request additional grant funding to make-up that shortfall.

The scope and complexity of the R&D, vessel redesign, and hybrid propulsion system installation for Hull 6503 (Tug MICHIGAN) and subsequent vessels (Hulls 6504 and 6505) has increased our costs more than 20%, above and beyond the amount originally budgeted DERA grant award amount. Instead of the originally estimated cost of \$1,550,790 per tug, the actual hybrid propulsion system cost is averaging \$1,874,689 per tug; an increased cost of \$323,899 per tug. Based upon the 40% cost share formula, the Ohio EPA's DERA grant for each of the new hybrid tugboats should, therefore, be increased by \$129,560 per tug (40% of the \$323,899 increased cost).

Therefore, in view of the above, we hereby request additional grant funding to make-up these shortfalls, a total supplemental grant amount of \$564,850 for the 4-boat hybrid power and propulsion systems program.

Consistent with the spirit of the original DERA grant intentions, the additional funding will ensure the resources needed are available for the successful completion of the program.

If you have any questions or need additional information, please feel free to contact me.

We thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph P. Starck, Jr.", written in a cursive style.

Joseph P. Starck, Jr.
President

	U.S. ENVIRONMENTAL PROTECTION AGENCY Assistance Amendment	GRANT NUMBER (FAIN): 00E66504 MODIFICATION NUMBER: 3 PROGRAM CODE: DS	DATE OF AWARD 02/27/2020
		TYPE OF ACTION Increase in Non EPA funds	MAILING DATE 02/27/2020
		PAYMENT METHOD: ASAP	ACH# 50282
		RECIPIENT TYPE: State	
RECIPIENT: Ohio Environmental Protection Agency P.O. Box 1049 Columbus, OH 43216-1049 EIN: 31-1334820		PAYEE: Ohio Environmental Protection Agency P.O. Box 1049 Columbus, OH 43216-1049	
PROJECT MANAGER Carolyn Watkins P.O. Box 1049 Columbus, OH 43216-1049 E-Mail: carolyn.watkins@epa.ohio.gov Phone: 614-752-3768		EPA PROJECT OFFICER Melanie Nowin 77 West Jackson Blvd., AR-18J Chicago, IL 60604-3507 E-Mail: nowin.melanie@epa.gov Phone: 312-353-9199	EPA GRANT SPECIALIST Alicia Sanders Assistance Section, MA-10J E-Mail: sanders.alicia@epa.gov Phone: 312-886-1972
PROJECT TITLE AND EXPLANATION OF CHANGES OEPA State Clean Diesel Program The Ohio Environmental Protection Agency (OEPA) will reduce diesel emissions and exposure throughout the State of Ohio. OEPA will replace older tugboats with cleaner and higher tier diesel engines using a diesel electric hybrid system. This project will reduce emissions of diesel particulate matter and other pollutants such as nitrogen oxides, carbon monoxide and hydrocarbons. Rebudgeting (Major >10%); EPA Point of Contact; This award amendment approves an increase to the OEPA total project budget and adds non-EPA funding in the amount of \$1,412,126; the new total project cost is \$7,074,534. The budget modification supports the recipient's plan to offset unforeseen increased costs associated with the tugboat replacement project. No additional federal funds are requested. This amendment also updates the EPA Point of Contact. This action is in accordance with the guidelines of the Diesel Emissions Reduction Act of 2010, and the Consolidated Appropriations Act of 2018 (P.L. 115-141).			
BUDGET PERIOD 10/01/2017 - 06/30/2020	PROJECT PERIOD 10/01/2017 - 06/30/2020	TOTAL BUDGET PERIOD COST \$7,074,534.00	TOTAL PROJECT PERIOD COST \$7,074,534.00
NOTICE OF AWARD			
Based on your Application dated 01/29/2020 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards \$0. EPA agrees to cost-share <u>11.65%</u> of all approved budget period costs incurred, up to and not exceeding total federal funding of \$823,876. Recipient's signature is not required on this agreement. The recipient demonstrates its commitment to carry out this award by either: 1) drawing down funds within 21 days after the EPA award or amendment mailing date; or 2) not filing a notice of disagreement with the award terms and conditions within 21 days after the EPA award or amendment mailing date. If the recipient disagrees with the terms and conditions specified in this award, the authorized representative of the recipient must furnish a notice of disagreement to the EPA Award Official within 21 days after the EPA award or amendment mailing date. In case of disagreement, and until the disagreement is resolved, the recipient should not draw down on the funds provided by this award/amendment, and any costs incurred by the recipient are at its own risk. This agreement is subject to applicable EPA regulatory and statutory provisions, all terms and conditions of this agreement and any attachments.			
ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)		AWARD APPROVAL OFFICE	
ORGANIZATION / ADDRESS U.S. EPA Region 5 Mail Code MA-10J 77 West Jackson Blvd. Chicago, IL 60604-3507		ORGANIZATION / ADDRESS U.S. EPA, Region 5 Air and Radiation Division 77 West Jackson Blvd., A-18J Chicago, IL 60604-3507	
THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY			
Digital signature applied by EPA Award Official Edward Pniak - Grants Management Officer			DATE 02/27/2020

Budget Summary Page

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$0
2. Fringe Benefits	\$0
3. Travel	\$0
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$0
7. Construction	\$0
8. Other	\$7,074,534
9. Total Direct Charges	\$7,074,534
10. Indirect Costs: % Base	\$0
11. Total (Share: Recipient <u>88.35</u> % Federal <u>11.65</u> %.)	\$7,074,534
12. Total Approved Assistance Amount	\$823,876
13. Program Income	\$0
14. Total EPA Amount Awarded This Action	\$0
15. Total EPA Amount Awarded To Date	\$823,876

Administrative Conditions

THE FOLLOWING TERM (S) AND CONDITION (S) HAVE BEEN ADDED :

A. CORRESPONDENCE CONDITION

The terms and conditions of this agreement require the submittal of reports, specific requests for approval, or notifications to EPA. Unless otherwise noted, all such correspondence should be sent to the following email addresses:

- Federal Financial Reports (SF-425):
rtpfc-grants@epa.gov and Alicia Sanders, sanders.alicia@epa.gov
- MBE/WBE reports (EPA Form 5700-52A):
Region5Closeouts@epa.gov, and Alicia Sanders, sanders.alicia@epa.gov
- All other forms/certifications/assurances, Indirect Cost Rate Agreements, Requests for Extensions of the Budget and Project Period, Amendment Requests, Requests for other Prior Approvals, updates to recipient information (including email addresses, changes in contact information or changes in authorized representatives) and other notifications:
Melanie Nowin, nowin.melanie@epa.gov, and Alicia Sanders, sanders.alicia@epa.gov
- Payment requests (if applicable):
Melanie Nowin, nowin.melanie@epa.gov, and Alicia Sanders, sanders.alicia@epa.gov
- Quality Assurance documents, workplan revisions, equipment lists, programmatic reports and deliverables: Melanie Nowin, nowin.melanie@epa.gov

All Administrative Conditions Remain the Unchanged

Programmatic Conditions

THE FOLLOWING TERMS AND CONDITIONS HAS BEEN UPDATED :

A. VOLUNTARY COST -SHARE OR OVERMATCH

Any voluntary matching funds provided by the state to qualify for the matching incentive, count towards the "EPA funds and state voluntary matching funds" described in Term and Condition P, below. Mandatory cost share funds provided by the state and/or eligible third parties cannot count towards the state's voluntary matching funds to qualify for the matching incentive. However, if a state requires a third-party cost-share contribution above and beyond the mandatory cost-share amount for the elected technology, then the "excess" cost-share may be applied towards the state voluntary match funds for the purpose of qualifying for the matching incentive.

This award and the resulting *aggregate* federal funding of **\$823,876** is based on estimated costs requested in the recipient's final approved workplan. Included in these costs is an *aggregate* voluntary cost-share contribution of **\$6,250,658** by the recipient in the form of a voluntary cost-share or overmatch (providing more than any minimum required cost-share) that the recipient included in its final approved workplan. The recipient must provide this voluntary cost-share contribution during performance of this award unless the EPA agrees otherwise in a modification to this agreement. While actual total costs may differ from the estimates in the recipient's application, EPA's participation shall not exceed the total amount of federal funds awarded.

If the recipient fails to provide the voluntary cost-share contribution during the period of award performance, and does not provide a satisfactory explanation, the Agency may consider this factor in evaluating future proposals from the recipient. In addition, if the voluntary cost-share contribution does not materialize during the period of award performance then EPA may reconsider the legitimacy of the award; if EPA determines that the recipient knowingly or recklessly provided inaccurate information regarding the voluntary cost-share or overmatch the recipient described in its final approved workplan, EPA may take action as authorized by 2 CFR.

THE FOLLOWING TERM AND CONDITION HAS BEEN RESCINDED :

A. VOLUNTARY MATCH INCENTIVE *(Located in the award dated 9/4/2018)*

All Remaining Programmatic Conditions Remain Unchanged.