

APPENDIX D-4
Beneficiary Eligible Mitigation Action Certification

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 attached

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.]

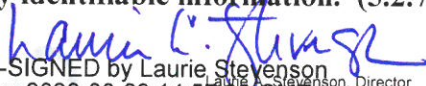
CERTIFICATIONS

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

1. This application is submitted on behalf of Beneficiary State of Ohio, 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: 7/10/20


E-SIGNED by Laurie Stevenson, Director
on 2020-06-09 14:57:36 GMT

[NAME]

[TITLE]

Ohio Environmental Protection Agency

[LEAD AGENCY]

for

State of Ohio

[BENEFICIARY]

Beneficiary Eligible Mitigation Action Certification
Supplemental Information (Attachments A, B, C, D and Supplemental)
Beneficiary: State of Ohio
Lead Agency: Ohio Environmental Protection Agency
May 2020 Modification Request In support of Funding Request No. 2

ATTACHMENT A
Funding Request and Direction

Eligible Mitigation Action Type Appendix D-2 item (specify): 4 Ferries/Tugs, and 10 Diesel Emission Reduction Act (DERA) Option.

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

Ohio's BMP filed May 31, 2018 allocates \$2,000,000 for tugboats and ferries. (This amount does not include Ohio EPA's administrative costs, which are calculated separately.) Ohio's BMP laid out Ohio EPA's intention to use approximately \$804,482 in DERA FFY 2017 and 2018 state allocation funds matched with approximately \$1,500,000 from Ohio's portion of the VW Mitigation to pay a portion of the engine component costs in a unique two-for-one tugboat replacement project. Because VW funding normally covers engine replacements but not entire vessel replacements for tugs and ferries, Ohio EPA and The Great Lakes Towing Company sought and received approval from US EPA for the project through the DERA Option. Ohio EPA Ohio's DERA FFY 17 workplan was approved by US EPA to provide 40% of the engine component costs to replace eight ancient single engine tugboats operating with uncontrolled (tier 0) emissions in Ohio's Lake Erie ports with four new twin engine tugboats using a new motor/generator unit (Foss diesel electric hybrid system) to achieve tier 3 emission standards. Subsequent to publication of the BMP, US EPA approved Ohio's DERA FFY18 workplan with a modification requested by the Company to use a different and more efficient diesel-electric hybrid technology (Logan FlexaDrive system) on three of the four new tugs, with additional DERA and Trust funding. These tugboats are based and operate primarily in the harbors of Ashtabula, Cleveland, Conneaut and Toledo, in counties that have been identified in Ohio's BMP as first or second priority for receiving funding based primarily on air quality concerns, concentrations of people in densely populated urban areas who have historically been disproportionately affected by the pollutants in diesel exhaust, and where VW and affiliated vehicles with illegal defeat devices were registered.

In the early spring of 2020, two of the new tugs are fully operational, the third has launched for sea trials and final outfitting, and construction of the fourth is well underway. These are the first tugboats in North America to utilize this new technology and much has been learned during the project. Installing the FlexaDrive system on the last three tugs required unanticipated modifications to the vessel hulls, at higher cost than previously foreseen. The total cost increase for these modifications is \$1,412,126. In December, 2019, Ohio EPA approved a request from the Great Lakes Towing Company to provide \$564,850 from Ohio's VW allocation to cover 40% of these additional costs, with the company providing 60% or \$847,276. These 40/60 percentages are consistent with the percentages used for the rest of the project. Ohio EPA submitted this request to US EPA as a modification to our approved DERA workplan, and received US EPA approval on 2/27/2020 through the attached amended assistance agreement. A copy of the company's letter explaining the cost increase is also attached.

Ohio EPA is now requesting that the VW Trustee transfer \$564,850 from Ohio's VW allocation to Ohio EPA so that we can reimburse the company for these unanticipated costs as the project is completed. We are also requesting transfer of \$39,539 (7% of \$564,850) for Ohio EPA's administrative costs, for a total transfer of \$604,389.

Ohio EPA had already allocated and received \$1,427,183 in VW funding to combine with \$804,482 in DERA funds to cover 40% of the project as originally budgeted, or \$2,231,665. Combined with the new allocation of \$564,850, the total VW funding allocated to the project is now \$1,992,033. This is within Ohio's BMP allocation of up to \$2 million for tugboats and ferries. We do not anticipate supporting any other projects in this category.

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

A contract was originally executed between Ohio EPA and the Great Lakes Towing Company on 2/7/18 for an initial grant of \$1,482,865 approved in the DERA FFY17 workplan, to provide 40% of the anticipated engine components for the four new tugs, to be paid with a combination of \$384,332 from Ohio EPA's DERA FFY17 state allocation from USEPA, and \$1,098,533 from Ohio's Trust funds. The Company committed to provide 60% of the engine components for the four new tugs, for \$2,224,297, plus the remaining costs of constructing the new vessels.

That contract was first amended on 7/12/18 to increase the size of the grant award by \$748,000 to cover 40% of the engine component costs for the more expensive Logan FlexaDrive diesel electric hybrid technology on three of the four new tugs. This new technology provided additional emission reduction benefits and considerably lower operating costs for the new tugs. As approved in 2018, the grant to Great Lakes Towing was \$2,231,665 to cover 40% of the engine components of all four new tugs (one with the originally approved Foss diesel electric hybrid technology, and three with the approved, more expensive FlexDrive diesel electric hybrid technology). Total federal (DERA) share of the project was approved as \$804,482, broken out as \$384,332 from Ohio's 2017 DERA state allocation, plus \$1,890 in unspent funds from another DERA 2017 Ohio project that US EPA approved reallocating to the tugboat project, plus \$418,260 from Ohio's 2018 DERA state allocation. The remainder of the grant to Great Lakes Towing (\$2,231,665 total, minus \$804,482 DERA share) as approved in 2018 was \$1,427,183 to be paid from Ohio's VW Trust allocation, along with \$99,903 or 7% for Ohio EPA's administrative costs to oversee this multi-year project, for a total of \$1,527,086 from the Trust. This was allocated originally as \$1,098,533 from Ohio's Trust funds pledged as match for the FY17 DERA funds, plus an additional \$328,650 from Ohio's Trust funds pledged as match for Ohio's FY18 DERA funds. The Company's commitment was increased to still provide 60% of the engine component costs (\$3,348,127) of the project as modified in 2018, along with the remaining costs of constructing the four new vessels.

A copy of Ohio's US EPA-approved DERA 2018 workplan was submitted with the original D-4 request for tugs and ferries. Ohio EPA and the company executed a thirty-six month contract, with a project period to run through October 30, 2021 to allow the time needed for construction of four new vessels. Ohio EPA authorized the Company to initiate purchasing after receiving acceptable documentation that they are using a competitive procurement process.

The project is on schedule and nearing completion. The *Ohio*, first of the four new tugs, launched in December 2018 for sea trials and was christened at the National Museum of the Great Lakes in Toledo

on June 21, 2019. US EPA approved an alternate disposition for the old tug *Ohio* to be placed on permanent exhibit at the Museum after the engines had been decommissioned in accordance with DERA and Trust program requirements. Ohio EPA program staff conducted a site visit to the Great Lakes Towing Company's Cleveland shipyard on February 4, 2019 to observe construction on the second and third new tugs (Hull 6503, the tug *Michigan*, and Hull 6504, the tug *Pennsylvania*.) Program staff conducted another site visit to the shipyard February 12, 2019 to observe decommissioning and engine destruction of two of the eight old vessels, the *California* and the *Maine*. Photo documentation has been provided to US EPA in Ohio's DERA quarterly reports. The second new tug *Michigan* was commissioned at the Cleveland shipyard on July 22, 2019, and is currently in service providing tows. By the end of March, 2020, Hull 6504 tug *Pennsylvania* is completing final mechanical and electrical fit-put, receiving coatings and is ready for joiner work to commence. Hull 6505 tug *Wisconsin* is well under construction with all modules assembled, mechanicals and electrical systems work underway, and vessel paint and coatings began in March.

As the Company has achieved project milestones, Ohio EPA verified progress made and invoices submitted for reimbursement. Because of the shorter timelines for expenditure of DERA funds, those \$804,482 dollars were the first used to pay reimbursements. Following expenditure of the DERA funds Ohio EPA has approved reimbursement payments of \$789,708 from the available \$1,427,183 allocated VW funds, leaving a balance available of \$637,475 to cover the remaining allowable costs of the grant as amended in 2018.

Ohio EPA and US EPA have now approved a second project amendment on 2/27/2020, to add \$564,850 in additional VW funds to the project in order to cover 40% of the unanticipated costs of modifying the hulls on the three newest tugs to accommodate the larger FlexaDrive diesel electric hybrid system. The Projected Trust Allocations Table in Attachment B includes this anticipated additional funding request for tugs and ferries.

Ohio EPA also respectfully requests the transfer of \$39,539 (7% of the grant increase amount of \$564,850) for our administrative costs, which will be itemized in the required semi-annual reports to the Trustee in terms of staff hours, equipment and travel costs incurred in reviewing and overseeing implementation of this tugboat replacement project. Ohio EPA's administrative costs related to this project began with preparation and submittal of Ohio's FFY 2017 and FFY 2018 DERA state allocation workplans and quarterly reports, preparation and submittal of Ohio's Beneficiary Mitigation Plan in May 2018 and continued with active oversight of new vessel construction and old engine decommissioning in 2018-2020. Ohio EPA gave a presentation on the project to the Midwest Clean Diesel Initiative Steering Committee at US EPA Region 5 in Chicago April 25, 2019, and at the Green Marine GreenTech Conference in Cleveland June 6, 2019.

Estimate of Anticipated NOx Reductions (5.2.3)

Ohio EPA used US EPA's [Diesel Emission Quantifier](#) (DEQ) tool to estimate annual emission reduction benefits to be achieved by the project as modified in the DERA FFY 2018 workplan to be 393.187 tons, broken out as follows: 32.767 tons of NOx, 0.516 tons of PM_{2.5}, 0.294 tons of HC, 5.910 tons of CO, and 353.700 tons of CO₂. These tugs are operating in harbors adjacent to densely populated residential, commercial and industrial neighborhoods in Ashtabula, Cleveland, Conneaut and Toledo.

Identification of Governmental Entity Responsible for Reviewing and Auditing Expenditure of Eligible Mitigation Action Funds to Ensure Compliance with Applicable Law (5.2.7.1)

The Ohio Environmental Protection Agency.

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

The Ohio Environmental Protection Agency, as the lead agency for the State of Ohio implementing the Beneficiary Mitigation Plan, 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.

Ohio EPA has established a webpage on the VW Settlement and mitigation actions, <https://epa.ohio.gov/oeo/#131365122-vw-mitigation-grants>. This site includes Ohio's Beneficiary Mitigation Plan; public comments received during Plan development and Ohio EPA's response; [short descriptions of all projects selected for funding](#) to date; and a [chart](#) of Ohio planned allocations by sector and amounts awarded. To facilitate public record and file review requests, Ohio EPA is also 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>. For each annual grant application cycle Ohio EPA is offering, the VW program web site also includes the Request for Proposals, grant application guidelines; slides and recordings from webinars for prospective grant applicants; posted questions and answers compiled from email and telephone inquiries received by Ohio EPA during the grant application cycle. For the already completed 2018 grant cycle, the VW program web site includes a [rank ordering of all 117 applications](#) received by cost effectiveness of the projected emission reductions. The 2019 application cycle opened on June 3, 2019 and deadline on August 2, 2019.

During development of Ohio's draft Beneficiary Mitigation Plan in 2016, Ohio EPA issued news releases and sent an initial email announcement inviting comments to 20,355 addresses from all the Agency's mailing lists. From that effort, Ohio EPA developed and currently maintains an electronic listserv, open to the public, to communicate news, events, and information specifically about Mitigation Trust Fund and other diesel emission reduction grant application opportunities and awarded projects. The listserv currently includes contact information for more than 4,300 individuals. As each new set of grants is awarded for fleet projects, Ohio EPA issues a news release and emails this list of stakeholders to announce the awarded grants from Ohio's Mitigation Trust Fund. This information is also shared through partner organizations such as the Ohio School Boards Association, Ohio Public Transit Association, regional planning agencies, Clean Fuels Ohio (Ohio's US DOE Clean Cities affiliate), the Midwest Clean Diesel Initiative coordinated by US EPA Region 5 in Chicago, and the national [VW Settlement Clearinghouse](#) and [VW Settlement state and local programs website](#) maintained by NASEO and NACAA.

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

Ohio will provide up to 40% of the engine component costs for four new tugboats under this DERA Option project, using a combination of Ohio's Mitigation Trust Funds and Ohio's DERA FFY17 and FFY18 state clean diesel allocations, as outlined above. The recipient Great Lakes Towing Company is providing 60% of the engine component costs, including the unanticipated costs for hull modifications, and 100% of all the remaining costs of construction of the four new tugboats.

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

On February 23, 2018, Ohio EPA provided notice, via letter and email, of availability of Mitigation Action Funds to all the parties named in 4.2.8, as well as the Wright-Patterson Air Force Base (WPAFB) Civil Engineer Group, the WPAFB Environmental Branch, both in Dayton, and the U.S. Army Corps of Engineers Great Lakes and Ohio River Division in Cincinnati. The notification to the U.S. Fish and Wildlife Service was copied to the Ottawa National Wildlife Refuge in Oak Harbor, Ohio. Notification to the U.S. Forest Service was copied to the Wayne National Forest headquarters in Nelsonville, Ohio. Notification to the National Park Service was copied to the Cuyahoga Valley National Park office in Brecksville, Ohio. The notice included a summary description of the Volkswagen Settlement including links to Appendix D-2 and Ohio's at-that-time Draft Beneficiary Mitigation Plan with a listing of Eligible Mitigation Actions, an explanation of how Ohio EPA would evaluate grant applications, and instructions to sign up for notification about implementation of Ohio's BMP, funding opportunities and application guidelines for the program in Ohio.

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).

This program is reducing emission exposures of children and adults living and working around harbors in Ashtabula, Cleveland, Conneaut and Toledo where these tugboats operate. The counties where these harbors are located (Ashtabula, Cuyahoga and Lucas) have all been designated as priority for receiving Environmental Mitigation Funds based on the following considerations:

- air quality (Ohio counties of concern due to nonattainment of national air quality standards for ozone and PM_{2.5});
- historical levels of diesel emissions;
- the location of concentrated sources of air pollution such as distribution centers, multimodal centers, ports, rail and bus terminals and airports;
- the counties where the most VW vehicles equipped with defeat devices were registered in Ohio; and
- county overlays using U.S. EPA's [EJScreen: Environmental Justice Screening and Mapping Tool](#).

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

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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 Priak - 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.