

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

**BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION**

Beneficiary Maryland

Lead Agency Authorized to Act on Behalf of the Beneficiary Maryland Department of the Environment  
*(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>	MD State Projects MDOT (EMA-2)
<b>Beneficiary's Project ID:</b>	MDOT-1-2020
<b>Funding Request No.</b>	<i>(sequential)</i> 6
<b>Request Type: (select one or more)</b>	<input checked="" type="checkbox"/> Reimbursement <input type="checkbox"/> Advance <input type="checkbox"/> Other (specify): _____
<b>Payment to be made to: (select one or more)</b>	<input type="checkbox"/> Beneficiary <input checked="" type="checkbox"/> Other (specify): <u>The Maryland Department of Transportation</u>
<b>Funding Request &amp; Direction (Attachment A)</b>	<input type="checkbox"/> Attached to this Certification <input checked="" type="checkbox"/> To be Provided Separately

**SUMMARY**

<b>Eligible Mitigation Action</b>	<input checked="" type="checkbox"/> Appendix D-2 item (specify): <u>2- Class 4-8 School Bus, Shuttle Bus, or Transit Bus</u>
<b>Action Type</b>	<input type="checkbox"/> Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal):
<b>Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1):</b> See Attached	
<b>Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):</b> See Attached	
<b>Estimate of Anticipated NOx Reductions (5.2.3):</b> See Attached	
<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 Attached	
<b>Describe how the Beneficiary will make documentation publicly available (5.2.7.2).</b> See Attached	
<b>Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8).</b> See Attached	
<b>Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9).</b> See Attached	

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.]

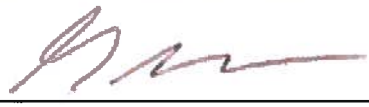
**CERTIFICATIONS**

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

1. This application is submitted on behalf of Beneficiary Maryland, 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: 4/30/20



George S. (Tad) Aburn, Jr.  
Director, Air and Radiation Administration|  
**Maryland Department of the Environment**  
[LEAD AGENCY]

for  
**Maryland**  
[BENEFICIARY]

**Appendix D-4 – Supplemental Information  
Beneficiary Eligible Mitigation Action Certification**

**Beneficiary: Maryland**

**Lead Agency: Maryland Department of the Environment**

**In support of funding request no. 6**

**MD State Projects MDOT (EMA-2)**

**Appendix D4 – Summary**

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

This funding request falls under the State Agency Projects that are detailed starting on page 16 of Maryland’s Beneficiary Mitigation Plan (BMP) through page 20. Specifically the projects outlined for this funding request are detailed on page 17, under Section D(1)(b): 40-Foot Buses and on page 18, under Section D(3): 40-foot and 60-foot Transit Buses. This funding request will be used to replace older diesel transit buses that are operated by the Maryland Department of Transportation Maryland Aviation Administration (MAA) at the Baltimore/Washington International (BWI) Airport with new electric transit buses, as well as to replace older diesel transit buses that are operated by the Maryland Department of Transportation Maryland Transit Administration (MTA) in Baltimore City with new electric transit buses.

The projects outlined in Maryland’s BMP are slightly different than what this funding request represents. Specifically, the funding amounts have changed with regards to MTA’s and MAA’s project totals. However, the total funding from Maryland’s Volkswagen Settlement allocated to State Agency’s has not changed. Also of note, in Maryland’s BMP, MTA originally planned to replace four older diesel transit buses with new diesel transit buses, but has since decided to use the funds to purchase four new electric transit buses instead. This change increased the funding allocation for MTA’s transit bus project, however they elected to forego replacing light-rail equipment that was outlined in Maryland’s BMP, under Section D(1)(a), in order to keep the funding levels similar.

This funding request focuses on Eligible Mitigation Action 2 – Class 4-8 School Bus, Shuttle Bus, or Transit Bus, and will use \$10,310,256 to replace 12 older diesel transit buses with new electric transit buses. MTA will use \$3,625,600 from the VW Trust to replace four of their oldest diesel transit buses with new electric transit buses and MAA will use \$6,684,656 from the VW Trust to replace eight of their oldest diesel transit buses with new electric transit buses.

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

The Maryland Transit Administration will replace four of their oldest transit buses with the worst emission level certification with new battery electric buses. The total cost of these replacement vehicles, including the cost and installation of two fast chargers is \$4,400,600. MTA is committed to providing \$775,000 in matching funds and has requested \$3,625,600 from Maryland’s Volkswagen Trust Funds to help fund this project. The four buses being proposed for replacement are 2004 or 2005 model year New Flyer diesel buses. These buses have between 450,000 and 600,000 miles of service on them and have an average fuel economy of 2.1 gallons.

These buses operate in Baltimore City, which has been designated as a nonattainment area in Maryland. In 2016, Baltimore ranked in the top 10 worst locations for air pollution in the United States with 114 days of elevated air pollution (Elizabeth Ridlington, Frontier Group & Christy Leavitt Environment America Research & Policy Center, Summer 2018)<sup>1</sup>. 60% of this pollution is from transportation vehicles.

MAA will replace eight of their oldest transit buses with new battery electric buses. The total cost of these replacement vehicles, including the cost and installation for four charging stations is \$8,424,656. MAA is committed to providing \$1,740,000 in matching funds and has requested \$6,684,656 from Maryland’s Volkswagne Trust Funds to help fund this project. The eight buses being proposed for replacement are 2004 model year Gilig forty-foot buses.

These buses operate in and around the BWI Airport which resides in a suburb of Baltimore City and is part of the Baltimore Metro Area, an area of the State that often experiences high levels of harmful emissions and pollutants. The resulting emission reductions will provide benefits to area around the airport that continuously experience disproportionate amounts of emissions due to the constant air traffic as well as vehicle traffic that results from the airport.

MDE expects these projects to result in the following reductions in air pollutants:

Pollutant	NOx	PM 2.5	GHG
Pollution Reduction (Lifetime Tons)	55.14	1.959	16,369

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<sup>1</sup> Frontier Group

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

Annual NOx reductions are estimated to be 7.08 Tons. Lifetime NOx reductions are estimated to be 55.14 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):**

The Maryland Department of the Environment is responsible for all Volkswagen Mitigation Plan projects in Maryland.

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

All documentation will be made publicly available on the Maryland Department of the Environment's Maryland Volkswagen Mitigation Plan website. This site can be found at:

<https://mde.maryland.gov/programs/Air/MobileSources/Pages/MarylandVolkswagenMitigationPlan.aspx>

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

MTA and MAA are both Transportation Business Units of the Maryland Department of Transportation (MDOT). As part of a state agency, they are therefore eligible for 100% funding through the VW Settlement. However, MTA will provide a 17.6% match for their electric transit bus project and MAA will provide a 20.7% match for their transit bus project. MDOT's match will include the vehicle outfit costs such as necessary electronics, vehicle wraps, as well as the needed design and engineering for the charger installation. Any project administration costs incurred by MAA and MTA will be covered in the local match as well.

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

The Maryland Department of the Environment sent the required notifications to the specified U.S. Government Agencies on February 27<sup>th</sup>, 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):**

The buses operated by MTA are deployed throughout the City of Baltimore, an area of the State designated as nonattainment for ozone and an area that constantly experiences a disproportionate amount of harmful vehicle emissions. Replacing these aging diesel transit buses with new battery electric buses will remove those resulting emissions from the area, providing direct health benefits to the residents of Baltimore City.

The buses operated by MAA are deployed at the BWI airport. Communities in and around airports often see higher levels of air pollutants as a result of increased vehicular traffic as well as emissions from air traffic and the vehicles at the port needed to operate the facility. By converting these diesel buses to full electric buses, those emissions will be removed from the airport, providing health benefits to the residents around the airport, as well as workers, and travelers using BWI.



**ATTACHMENT B**

**PROJECT MANAGEMENT PLAN**  
**PROJECT SCHEDULE AND MILESTONES**

Milestone	Date
Request for Proposals announced	2/13/19
Request for Proposals Application Deadline	5/6/19
MDE Reviews applications for State Agency Projects	Jan/Feb 2020
MDE Submits Funding Request to Trustee –Appendix D-4	Apr 2020
Trustee Acknowledges Receipt of Project Certification and Funding Direction	Receipt from Trustee
Trustee Allocates Share of State Funds for Approved Project	Transfer Date
Grant Agreements signed with selected award recipients	CY 2020, Q2
Project Sponsor provides detailed invoices for all claimed project costs, proof of destruction, required certification documents to MDE to support direction to Trustee for Payment (Reimbursement).	CY 2021, Q2
MDE completes review and certifies payment direction to Trustee (Reimbursement)	CY 2021, Q2
Trustee Acknowledges Receipt of Direction for Payment(s) (Reimbursement)	CY 2021, Q2
Project Sponsor Certifies Project Completion	CY 2021, Q2
MDE Reports Project Completion	CY 2021, Q2

**PROJECT BUDGET**

Period of Performance: _____				
Budget Category	Total Approved Budget	Share of Total Budget to be Funded by the Trust	Cost-Share, paid by MDOT TBUs	Cost-Share, if applicable (Entity #2)
1. Equipment Expenditure	\$12,825,256	\$10,310,256	\$2,515,000	NA
2. Contractor Support	\$0	\$0	\$0	NA
3. Subrecipient Support	\$0	\$0	\$0	NA
4. Administrative	\$103,100	\$103,100	\$	NA
<b>Project Totals</b>	<b>\$12,928,356</b>	<b>\$10,413,356</b>	<b>\$2,515,000</b>	NA
<b>Percentage</b>	<b>100%</b>	<b>80.5%</b>	<b>19.5%</b>	<b>%</b>

**PROJECTED TRUST ALLOCATIONS:**

	2020
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$10,413,356
2. Anticipated Annual Cost Share	\$2,515,000
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$12,928,356
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$0
5. Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$10,413,356
6. Total Funding Allocated to for Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$10,413,356
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$78,033,000
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 7 minus line 6)	\$67,619,644

## **ATTACHMENT C**

### **DETAILED PLAN FOR REPORTING ON ELIGIBLE MITIGATION ACTION IMPLEMENTATION**

The Maryland Department of the Environment (MDE) will provide detailed reporting on this Environmental Mitigation Trust projects in two ways:

1. Updates to MDE's Volkswagen Mitigation Trust webpage (<https://mde.maryland.gov/programs/Air/MobileSources/Pages/MarylandVolkswagenMitigationPlan.aspx>)
2. Maryland's semiannual reporting obligation to Wilmington Trust.

MDE maintains a VW Mitigation Trust webpage to provide information and updates to the public in a timely manner. MDE will utilize the webpage to inform the public of project awards and make all documents received publicly available by posting them on that page.

Subparagraph 5.3 of the Environmental Mitigation Trust Agreement for State Beneficiaries details Maryland's Reporting Obligations: "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."

In MDE's semiannual report following the Trustee's approval of this project, MDE will describe the progress of implementing this Eligible Mitigation Action and 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**

Each of MDOT's Transportation Business Units (TBU) submitted estimates for the total cost for each replacement vehicle, along with charging infrastructure estimates where eligible. Replacement vehicles under the State Agency Program are reimbursable based on the final invoice. Trust Funds are eligible to cover 100% of the amount of the replacement vehicle, however, each TBU will provide matching funds to help cover a portion of the project's cost.

MDOT TBU	Number of Buses	Average new bus cost, including charging infrastructure	Total Project Cost	VW Funds Requested
Maryland Aviation Administration	8	\$1,053,082	\$8,424,656	\$6,684,656
Maryland Transit Administration	4	\$1,100,150	\$4,400,600	\$3,625,600