

## **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 Transit Bus Replacement Program
<b>Beneficiary's Project ID:</b>	MDTB-2020
<b>Funding Request No.</b>	(sequential) 11
<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>Awarded Municipalities</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)**

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


**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: 7/1/20

  
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. 11**  
**MD Transit Bus Replacement Program**

**Appendix D4 – Summary**

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

This project falls under the Transit Bus Replacement program of the Local Governments and Communities section detailed on page 15 of Maryland's Beneficiary Mitigation Plan (BMP). This funding request will focus on Eligible Mitigation Action 2 – Class 2 School Bus, Shuttle Bus, or Transit Bus and will use \$5,465,153 to replace 19 old diesel transit buses with new transit buses.

Ocean City will use \$526,038 to replace three older diesel transit buses with one new diesel transit bus. Prince George's County will use \$2,216,984 to replace eight diesel transit buses with new all-electric transit buses. Harford County will use \$1,800,000 to replace five diesel buses with new Compressed Natural Gas transit buses. Howard County will use \$922,131 to replace three diesel transit buses with new diesel transit buses.

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

Ocean City will replace three older diesel transit buses with one new, larger, articulating diesel transit bus. By removing three older transit buses from service, and replacing them with one new transit bus, the city will see improved emission reductions compared to replacing only a single transit bus. The City will replace two 2002 40' Thomas diesel transit buses and one 2007 Blue Bird diesel transit bus with a new 60' New Flyer clean diesel articulating transit bus. Ocean City has requested \$526,038 of Volkswagen Settlement Funds to cover 80% of the cost to replace these diesel transit buses with one new diesel transit bus.

The new transit bus will operate in an area of the state that sees a large influx of residents and workers during the summer, which coincides with peak ozone season. The reduction in NOx emission from removing three old diesel buses will contribute to reduced harmful emissions to a sector of the population that often relies exclusively on public transportation to travel to and from work to meet the demands of the tourism-based economy.

Prince George's County will replace eight 2007 Gillig diesel transit buses with new all-electric transit buses. Prince George's County requested \$2,216,984 to cover the 39% incremental increase in cost as compared to new diesel transit buses.

Prince George's County commits to placing these transit buses in communities within identified opportunity zones.

Howard County will replace three 2002 Gillig Diesel transit buses with new 35' diesel transit buses. Howard County requested \$922,131 to cover 75% of the cost of replacing these older diesel transit buses.

Howard County is a designated non-attainment area, and Howard County is committed to deploying these new clean diesel transit buses in areas of the county that consistently bear a disproportionate amount of the air pollution problem plaguing Howard County.

Harford County will replace three 2008 and two 2009 diesel transit buses with new, Compressed Natural Gas (CNG) transit buses. Harford County has requested \$1,800,000 to cover 80% of the cost of replacing these vehicles.

Harford County is a designated non-attainment area whose air pollution is exacerbated by the emissions of nearby Baltimore City. These new, cleaner CNG transit buses will greatly reduce the NOx and PM emissions that contribute to Harford County's air pollution problem and relieve the overburdened communities that often rely on public transportation services.

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

Pollutant	NOx	PM 2.5	GHG
Pollution Reduction (Lifetime Tons)	138.1	2.28	10,242

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

Annual NOx reductions are estimated to be 9.2 Tons. Lifetime NOx reductions are estimated to be 139 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):**

The vehicles being replaced under this funding request are all owned and operated by local governments and are therefore eligible for 100% funding from Volkswagen Settlement funds. However, in Maryland's BMP, local governments were required to provide at least a 20% match for all eligible projects. Ocean City and Harford County have agreed to provide the 20% match required for purchasing replacement vehicles, and Prince George's County and Howard County have agreed to provide even more matching funds for their projects.

Requiring local governments to provide a match has allowed Maryland to fund more replacement projects across the State and will provide greater overall emission reductions to our Volkswagen Mitigation Projects.

**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):**

These mitigation action will replace aging, older NOx standard transit buses with new, clean diesel, CNG, or electric transit buses, greatly reducing the direct NOx emissions as well as other harmful pollutants. Transit buses often service areas of the State that continue to be adversely affected by higher levels of harmful pollutants. These new transit buses will be deployed on designated routes to best relieve that burden.

At the same time, the Commission has been working to ensure that the public has access to the information it collects.

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**ATTACHMENT B****PROJECT MANAGEMENT PLAN**  
**PROJECT SCHEDULE AND MILESTONES**

<b>Milestone</b>	<b>Date</b>
Request for Proposals announced	2/13/19
Request for Proposals Application Deadline	5/6/19
MDE Reviews applications for Transit Bus Replacement Program	Feb 2020
MDE Submits Funding Request to Trustee –Appendix D-4	July 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, Q3
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, Q1
MDE completes review and certifies payment direction to Trustee (Reimbursement)	CY 2021, Q1
Trustee Acknowledges Receipt of Direction for Payment(s) (Reimbursement)	CY 2021, Q1
Project Sponsor Certifies Project Completion	CY 2021, Q1
MDE Reports Project Completion	CY 2021, Q1

**PROJECT BUDGET**

<b>Period of Performance: _____</b>				
<b>Budget Category</b>	<b>Total Approved Budge</b>	<b>Share of Total Budget to be Funded by the Trust</b>	<b>Cost-Share, paid by bus owners</b>	<b>Cost-Share, if applicable (Entity #2)</b>
1. Equipment Expenditure	\$9,809,056	\$5,465,153	\$4,343,903	NA
2. Contractor Support	\$0	\$0	\$0	NA
3. Subrecipient Support	\$0	\$0	\$0	NA
4. Administrative	\$54,651	\$54,651	\$	NA
<b>Project Totals</b>	<b>\$9,863,707</b>	<b>\$5,519,804</b>	<b>\$4,368,903</b>	<b>NA</b>
<b>Percentage</b>	<b>100%</b>	<b>55.9%</b>	<b>44.1%</b>	<b>%</b>

**PROJECTED TRUST ALLOCATIONS:**

	2021
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$5,519,804
2. Anticipated Annual Cost Share	\$4,343,903
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$9,863,707
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$0
5. Cumulative Approved Beneficiary Allocation	\$5,235,558.97
6. Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$5,519,804
7. Total Funding Allocated to for Beneficiary, inclusive of Current Action by Year (line 4 plus line 6)	\$5,519,804
8. Total Fund Approved for Beneficiary, inclusive of Current Action by Year (line 5 plus line 6)	\$10,755,362.97
9. Beneficiary Share of Estimated Funds Remaining in Trust	\$78,033,000
10. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 9 minus line 7)	\$72,513,196
11. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions Approved by Trustee (line 9 minus line 8)	\$67,277,637.03

## **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**

Applicants were asked to submit the total cost for each replacement vehicle, along with charging infrastructure estimates where eligible, in their VW proposal. Replacement vehicles under the Transit Bus Replacement Program are reimbursable based on the final invoice. Per MDE's program design, Trust Funds are eligible to cover up to 80% of the eligible mitigation actions. However, some applicants have agreed to provide even more matching funds than required.

Transit Bus Applicant	Number of Buses	Fuel Type	Vehicle Manufacturer Quote per vehicle	Total Project Cost	VW Funds Requested
Ocean City	1	Diesel	\$657,548	\$657,548	\$526,038
Prince George's County	8	Electric	\$709,000	\$5,672,000	\$2,216,984
Howard County	3	Diesel	\$409,836	\$1,229,508	\$922,131
Harford County	5	CNG	\$450,000	\$2,250,000	\$1,800,000

# THE UNIVERSITY OF CHICAGO DIVISION OF THE PHYSICAL SCIENCES DEPARTMENT OF CHEMISTRY

REPORT OF THE  
 COMMITTEE ON THE  
 REVISION OF THE  
 CHEMICAL ABSTRACTS  
 FOR THE YEAR 1964

Author	Title	Journal	Year	Volume	Page
Adams, R. N.	Reaction of ...	J. Am. Chem. Soc.	1964	86	1234
Baker, J. D.	Study of ...	Can. J. Chem.	1964	42	567
Chen, H. C.	Investigation of ...	Chin. Chem. Lett.	1964	1	89
Davis, E. F.	Analysis of ...	Anal. Chem.	1964	36	101
Evans, G. H.	Research on ...	Trans. Faraday Soc.	1964	60	234
Foster, L. M.	Work on ...	J. Phys. Chem.	1964	68	345
Gilman, H. W.	Study of ...	J. Org. Chem.	1964	29	456
Harris, J. K.	Investigation of ...	J. Polym. Sci.	1964	13	789
Johnson, R. L.	Research on ...	J. Chem. Phys.	1964	40	112
Kelly, S. M.	Work on ...	J. Biol. Chem.	1964	239	678
Levy, I. H.	Study of ...	J. Am. Chem. Soc.	1964	86	1345
Martin, A. J. P.	Investigation of ...	Proc. R. Soc. Lond.	1964	278	901
Nelson, D. R.	Research on ...	J. Chem. Phys.	1964	40	123
Olson, J. A.	Work on ...	J. Am. Chem. Soc.	1964	86	1456
Parker, C. W.	Study of ...	J. Phys. Chem.	1964	68	356
Reid, J. D.	Investigation of ...	J. Chem. Phys.	1964	40	134
Roberts, J. D.	Research on ...	J. Am. Chem. Soc.	1964	86	1567
Shaw, D. L.	Work on ...	J. Biol. Chem.	1964	239	689
Smith, E. B.	Study of ...	J. Am. Chem. Soc.	1964	86	1678
Taylor, H. S.	Investigation of ...	J. Chem. Phys.	1964	40	145
Thompson, J. W.	Research on ...	J. Am. Chem. Soc.	1964	86	1789
Waller, J. E.	Work on ...	J. Biol. Chem.	1964	239	690
White, R. M.	Study of ...	J. Am. Chem. Soc.	1964	86	1890
Wilson, J. D.	Investigation of ...	J. Chem. Phys.	1964	40	156
Yamamoto, Y.	Research on ...	J. Am. Chem. Soc.	1964	86	1901
Zimmerman, J. L.	Work on ...	J. Biol. Chem.	1964	239	691