

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)

Action Title:	MD Class 8 Vehicle Replacement
Beneficiary's Project ID:	MDC8-EMA-1
Funding Request No.	<i>(sequential)</i> 14
Request Type: (select one or more)	<input checked="" type="checkbox"/> Reimbursement <input type="checkbox"/> Advance <input type="checkbox"/> Other (specify): _____
Payment to be made to: (select one or more)	<input type="checkbox"/> Beneficiary <input checked="" type="checkbox"/> Other (specify): <u>Awarded Companies</u>
Funding Request & Direction (Attachment A)	<input type="checkbox"/> Attached to this Certification <input checked="" type="checkbox"/> To be Provided Separately

SUMMARY

Eligible Mitigation Action	<input checked="" type="checkbox"/> Appendix D-2 item (specify): <u>1-Class 8 Local Freight Trucks and Port Drayage Trucks</u>
Action Type	<input type="checkbox"/> Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal):
Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1): See Attached	
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2): See Attached	
Estimate of Anticipated NOx Reductions (5.2.3): See Attached	
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): See Attached	
Describe how the Beneficiary will make documentation publicly available (5.2.7.2). See Attached	
Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8). See Attached	
Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9). 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: 8/31/20



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. 14
MD Class-8 Vehicle Replacement

Appendix D4 – Summary

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

This project falls under the Private Sector and Federal Government section detailed on page 13 of Maryland’s Beneficiary Mitigation Plan (BMP). This section was reserved for private companies to submit proposals for vehicle replacements, and proposals were selected through a competitive process.

Coca Cola and Sysco submitted proposals for Class 8 heavy-duty diesel vehicle replacements. Coca Cola submitted a proposal to use \$570,000 to replace 30 heavy-duty diesel vehicles with new diesel-powered Class 8 vehicles. Sysco submitted a proposal to use \$749,258 to replace 34 heavy-duty diesel vehicles with new diesel-powered Class 8 vehicles.

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

Coca Cola will utilize Volkswagen Trust Funds to cover 20% of the cost to replace 30 heavy-duty diesel vehicles from model year 2003-2007. These vehicles will be replaced with new class 8 diesel-powered vehicles. \$570,000 of the total project budget of \$2,850,000 will come from the Volkswagen Settlement.

Coca Cola delivery trucks operate in both commercial and residential areas across Maryland. 23 of the 30 vehicles are located in Hanover, MD and operate in the surrounding areas. Hanover, MD is located in Anne Arundel County, which ranks fourth among Maryland counties for annual on-road diesel NOx emissions. Anne Arundel County is in non-attainment status for 8-hour ozone air quality standards. The remaining vehicles are located throughout the state of Maryland which will help distribute the emission reduction throughout the state.

Sysco will utilize Volkswagen Trust Funds to cover 22.1% of the cost to replace 34 heavy-duty diesel vehicles from model year 2004-2009. These vehicles will be replaced with new class 8 diesel-powered vehicles. \$749,258 of the total project budget of \$3,380,858 will come from the Volkswagen Settlement.

Sysco operates two distribution centers in Maryland. These distribution centers are located near targeted areas such as neighborhoods, schools, national parks, and medical facilities that are often overburdened by harmful vehicle pollution.

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

Pollutant	NOx	PM 2.5	GHG
Pollution Reduction (Lifetime Tons)	232.2	.876	731.9

Estimate of Anticipated NOx Reductions (5.2.3):

Annual NOx reductions are estimated to be 12.74 Tons. Lifetime NOx reductions are estimated to be 232.2 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 publicly 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 either Coca-Cola Bottling Company or Sysco Leasing LLC, both private companies. As required by the Volkswagen Settlement, these companies have agreed to provide the required matching funds for diesel replacement vehicles. Both companies are providing more than the 75% required match.

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 27th, 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):

Coca Cola delivery trucks operate in both commercial and residential areas across Maryland. 23 of the 30 vehicles are located in Hanover, MD and operate in the surrounding areas. Hanover, MD is located in Anne Arundel County, which ranks fourth among Maryland counties for annual on-road diesel NOx emissions. Anne Arundel County is in non-attainment status for 8-hour ozone air quality standards. The remaining vehicles are located throughout the state of Maryland which will help distribute the emission reductions throughout the state.

Sysco operates two distribution centers in Maryland. These distribution centers are located near targeted areas such as neighborhoods, schools, national parks, and medical facilities that are often overburdened by harmful vehicle pollution.

the first part of the paper, we discuss the general approach to the study of the structure of the group of automorphisms of a free group. In the second part, we give a detailed proof of the main theorem.

Let F_n be a free group of rank n . We denote by $\text{Aut}(F_n)$ the group of automorphisms of F_n . The main theorem of this paper is the following:

Theorem 1. Let $\sigma \in \text{Aut}(F_n)$ be an automorphism of F_n such that σ is not a Nielsen automorphism. Then the subgroup of $\text{Aut}(F_n)$ generated by σ and the inner automorphisms of F_n is a free group of rank n .

The proof of this theorem is given in the second part of the paper. The main idea of the proof is to show that the subgroup generated by σ and the inner automorphisms of F_n is a free group of rank n .

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 Transit Bus Replacement Program	Feb 2020
MDE Submits Funding Request to Trustee –Appendix D-4	September 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

Budget Category	Total Approved Budget	Share of Total Budget to be Funded by the Trust	Cost-Share, paid by Companies	Cost-Share, if applicable (Entity #2)
1. Equipment Expenditure	\$6,230,858	\$1,319,258	\$4,911,600	NA
2. Contractor Support	\$0	\$0	\$0	NA
3. Subrecipient Support	\$0	\$0	\$0	NA
4. Administrative	\$13,192	\$13,192	\$	NA
Project Totals	\$6,244,050	\$1,332,450	\$4,911,600	NA
Percentage	100%	21.3%	78.7%	%

PROJECTED TRUST ALLOCATIONS:

	2020
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$1,332,450
2. Anticipated Annual Cost Share	\$4,911,600
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$6,244,050
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$0
5. Cumulative Approved Beneficiary Allocation	\$24,481,378.97
6. Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$1,332,450
7. Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (line 4 plus line 6)	\$1,332,450
8. Total Fund Approved for Beneficiary, inclusive of Current Action by Year (line 5 plus line 6)	\$25,813,828.97
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)	\$76,700,550
11. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions Approved by Trustee (line 9 minus line 8)	\$52,219,171.03

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.

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**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 project. Coca-Cola Bottling Company and Sysco Leasing each provided estimates for the purchase of new diesel Class 8 trucks. Each company will provide more than the 75% required match.

Company	Number of Trucks	Fuel Type	Vehicle Cost	Total Replacement Cost	VW Share
Coca-Cola Bottling Company	30	Diesel	\$95,000	\$2,850,000	\$570,000
Sysco Leasing	34	Diesel	\$99,437	\$3,380,858	\$749,258

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
606 S. EAST ASIAN AVENUE
CHICAGO, ILLINOIS 60607

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