

APR 1 1 2019

Mr. Russell L. Crane Volkswagen Environmental Mitigation Trust c/o Wilmington Trust, N.A. as Trustee 1100 North Market Street Attn: Capital Markets & Agency Services Wilmington, DE 19890

Dear Mr. Crane,

The Missouri Department of Natural Resources has enclosed Missouri's sixteenth funding request through the Volkswagen Environmental Mitigation Trust (Project ID: Cat 5-EMA3 FY20-001). The department previously sent the enclosed D-4 submission electronically through Intralinks. The enclosure is to fulfill the requirement of a hard copy as required by paragraph 5.2 of the Trust Agreement.

Thank you for attention to this matter. If you have any questions regarding this submission, please contact Emily Wilbur, with the department's Air Pollution Control Program at P.O. Box 176, Jefferson City, MO 65102 or by phone at (573) 751-7840 or email at emily.wilbur@dnr.mo.gov.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Darcy A. Bybee

Director

DAB:cm

Enclosure



APPENDIX D-4 Beneficiary Eligible Mitigation Action Certification

Missouri Funding Request #16

Project ID: Cat 5-EMA3 FY20-001

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Belleficiary
Lead Agency Authorized to Act on Behalf of the Beneficiary: Missouri Department of Natural Resources

Lead Agency Authorized to Act on Behalf of the Beneficiary: Missouri Department of Natural Resources (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:	Switch Locomotives – FY2020			
Beneficiary's Project ID:	Cat 5-EMA3 FY20-001			
Funding Request No.	16			
Request Type: (select one or more)	☐ Reimbursement ☐ Advance ☐ Other (specify):			
Payment to be made to: (select one or more)	■ Beneficiary □ Other (specify):			
Funding Request & Direction (Attachment A)	☐ Attached to this Certification ☐ To be Provided Separately			

SUMMARY

Eligible Mitigation	Appendix D-2 item(specify):	Item 3: Freight Switchers				
Action Type	☐ 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):

State of Missouri

Missouri's BMP allocates \$2 million to marine and locomotive projects, which include eligible mitigation action (EMA) categories 3, 4, and 5. This funding request will fund switch locomotive projects under EMA category 3 throughout the state. The project will reduce NO_x emissions and encourage upgrades for privately owned fleets in Missouri, which are both specific goals listed in Missouri's BMP.

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

Switch locomotive repowers and replacements can significantly reduce NO_x emissions and have a co-benefit of reducing particulate matter. This project will reduce local diesel emissions exposure, while also decreasing regionally transported NO_x pollution that contributes to the formation of ground-level ozone pollution. Encouraging upgrades for privately owned fleets can reduce operation and maintenance costs thus increasing the company's sustainability and encouraging more private sector fleet upgrades in the future.

Estimate of Anticipated NO_x Reductions (5.2.3):

Per Missouri's BMP, the department estimates that the \$2 million dedicated to marine and locomotive projects will achieve an estimated 400-700 tons of lifetime NO_x emission reductions. This funding request represents approximately 40 percent of the total funding Missouri has dedicated to marine and locomotive projects. Based on this percentage, the projects funded through this funding request will achieve an estimated 160-280 tons of lifetime NO_x emission reductions. The department will calculate the emission reductions from each individual project implemented based on the characteristics of the actual switch locomotives repowered or replaced and include the calculated emission reductions in the semi-annual reports the department will submit to the trustee.

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):

Missouri Department of Natural Resources

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

The Missouri Department of Natural Resources, as lead agency for the state of Missouri implementing the Environmental Mitigation Plan, has established a webpage on the VW Trust and mitigation actions, https://dnr.mo.gov/env/apcp/vw.

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

The minimum cost share to be covered by private fleets that receive funds as part of this funding request will be seventy-five percent of the actual cost of the mitigation action for replacements and sixty percent of the actual cost of the mitigation action for repowers. If any government fleets receive funds from this funding request, their minimum cost share will be twenty-five percent of the actual cost of the project. Some fleet owners may cover more than these minimum amounts.

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

On February 28, 2018, the Department notified the Department of Interior, including the National Park Service and U.S. Fish and Wildlife Service, and the Department of Agriculture, including the Forest Service of the availability of VW funds for locations within Missouri. The Department did not receive notice from any other federal agency indicating interest in these funds.

If applicable, describe how the mitigation action will mitigate the impacts of NO_x emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

Locomotives are located near ports, rail yards, and urban cores that bear a disproportionate amount of the air pollution burden. These projects will help reduce emissions in these areas with higher concentrations of diesel emissions.

ATTACHMENTS

(CHECK BOX IF ATTACHED)

	Attachment A	Funding Request and Direction.
Ø	Attachment B	Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).
Ø	Attachment C	Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11).
V	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 <u>State of Missouri</u>, 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)

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[SIGNATURE]	[DATE]
v	
	DARCY BYBEE
	[NAME]
	AIR POLLUTION CONTROL
	PROGRAM DIRECTOR
	[TITLE]
	MISSOURI DEPARTMENT OF
	NATURAL RESOURCES
	[LEAD AGENCY]
	For
	STATE OF MISSOURI
	[BENEFICIARY]

ATTACHMENT B

Beneficiary Eligible Mitigation Action Certification – Missouri Funding Request #16 Project ID: Cat 5-EMA3 FY20-001

Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline

PROJECT MANAGEMENT PLAN

PROJECT SCHEDULE AND MILESTONES

Milestone	Date
DNR provides notice of availability of mitigation action funds	Aug/Sept 2019
Due date for project sponsors to submit proposals to lead agency	Oct/Nov, 2019
DNR provides approval of successful project sponsors' proposals	Dec 2019/Jan 2020
Project sponsors complete procurement and submit purchase orders	Project approval + 1 month
DNR submits attachment A to cover annual admin and project awards	Project approval +1 month
Trustee provides funds to DNR as requested in the attachment A	Project approval +1.5 months
Locomotives or engines delivered to project sponsors put into service or installed	Project approval + 3 months
Project sponsors submit evidence of locomotive/engine scrapping, invoices, proof of payment, and other documents required for reimbursement	Project approval + 3.5 months
DNR reviews, requests corrections if necessary, certifies project completion, and provides reimbursement	Project approval + 4 months
DNR reports to Trustee on status of and expenditures with mitigation actions completed and underway	Jan. 31 and July 31 each year

This process will repeat again next state fiscal year (July 2020-June 2021).

PROJECT BUDGET

Period of Performance: July 2019 – June 2021 Total **Share of Total Budget** Cost-Share, Approved to be Funded by the if applicable **Budget Trust** (Project Sponsors) **Budget Category** 1. Equipment Expenditure \$2,193,000 \$1,425,000 \$768,000 2. Contractor Support (Provide List of Approved Contractors as Attachment with approved funding \$0 \$0 \$0 ceilings) 3. Subrecipient Support (Provide List of Approved Subrecipients or Grant Awardees as Attachment with \$0 \$0 \$0 approved funding ceilings) 4. Administrative¹ \$32,000 \$32,000 \$0 **Project Totals** \$2,225,000 \$800,000 \$1,425,000 Percentage 100% 36.0% 64.0%

¹ Subject to Appendix D-2 15% administrative cap.

Beneficiary Eligible Mitigation Action Certification – Missouri Funding Request #16 Project ID: Cat 5-EMA3 FY20-001

PROJECTED TRUST ALLOCATIONS

(July	FY 2019 2018-June 2019)		FY 2020		FY 2021-28
_	7.240.204	_	44 722 447		10.000 722
\$	7,348,201	\$	14,/23,11/	\$	19,080,733
\$	9,630,831	\$	18,708,813	\$	24,088,846
\$	16,979,032	\$	33,431,930	\$	43,169,579
\$	-	\$	7,348,201	\$	22,071,318
\$	7,348,201	\$	14,723,117	\$	19,080,733
\$	7,348,201	\$	22,071,318	\$	41,152,051
\$	41,152,051	\$	33,803,850	\$	-
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ATTACHMENT C

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

Records of the applicant, selected projects, and financial reports will be made available on the department VW webpage in the form of a report to coincide with reporting requirements listed in the trust. Records may also be obtained through the state sunshine request portal.

ATTACHMENT D

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

Beneficiary Eligible Mitigation Action Certification – Missouri Funding Request #16

Project IDs: Cat 5-EMA3 FY20-001

Switch Locomotive Repower and Replacement Projects

Project Type	Engine Cost	Additional Components	Labor	Total
Repower (1,000 - 1,500 HP)	\$200,000 - \$500,000	\$10,000 - \$50,000	\$10,000 - \$50,000	\$220,000 - \$600,000
Repower (1,500 - 4,000 HP)	\$500,000 - \$1,500,000	\$25,000 - \$75,000	\$25,000 - \$75,000	\$550,000 - \$1,650,000
Replacement (1,000 - 1,500 HP)	-	-	-	\$350,000 - \$1,000,000
Replacement (1,500 – 4,000 HP)	-	-	-	\$600,000 - \$2,000,000

The department reviewed cost estimates for switch locomotive repower and replacement projects in the Midwest. The cost depends on several variables including the engine size and for repowers the complexity of the install, and the additional components needed for the new engines to function properly (wiring, software, etc.).