

CLASS 4 | 2006  
2007dreg  
LC

## Section 7: Application Scoring Matrix

Score Assigned	Attachment	Attachment Description
10	A	<b>Mitigation Action Description:</b> Related to Maine's Beneficiary Mitigation Plan
20 85% AVE \$ 3275 # FOR 2007 \$ 862 # FOR 2006	B	<b>NOx Emission Reduction:</b> NOx emission reductions estimate using EPA's Diesel Emission Quantifier
10 COMMUNITY SUPPORT; CHILDREN	C	<b>Health Benefits:</b> Maximized health benefits include: reductions in particulate matter and/or greenhouse gases; net reduction of diesel fuel use; or idle reduction strategies.
10 SCHOOL YARD	D	<b>Action Location:</b> Within an area with a disproportionate quantity of air pollution from diesel fleets, such as ports, rail yards, terminals, school depots/yards, and freight distribution areas.
0	E	<b>Class 1 Areas:</b> Benefits a designated federal Class 1 Area, specifically Acadia National Park, Roosevelt Campobello International Park, or the Moosehorn Wilderness Area located within the Moosehorn National Wildlife Refuge Area.
NO COST SHARE REFLECTED? SHOULD BE \$36,000 REQ. \$144,000	F	<b>Verified Funding:</b> Match or leveraged funding for cost sharing secured. Budget provided.
10	G	<b>Action Schedule:</b> Action implemented within two years of the award date. Schedule provided.
10	H	<b>Benefit Period:</b> Sustained emission benefits over the ten-year Trust Effective Period. Maintenance plan provided.
10	I	<b>Relevant Experience and Compliance Certification:</b> Existing administration and programmatic structure in place to implement diesel emission reduction or offset actions.

\* NEED COST SHARE VERIFICATION.

## Gates, Judy

---

**From:** Holly Vining <hviningsacs@sacs.csd109.k12.me.us>  
**Sent:** Thursday, September 06, 2018 2:10 PM  
**To:** Gates, Judy  
**Subject:** VW Application  
**Attachments:** 2351\_001.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Judy,

Please find our first round grant application for school bus replacement enclosed. A hard copy is in the mail.

Thank you.

Holly Vining  
Business Manager  
Regional School Unit #50  
922 Dyer Brook Road  
Dyer Brook, ME 04747  
(207)-757-8223  
(207)-757-8257fax  
[hviningsacs@rsu50.org](mailto:hviningsacs@rsu50.org)

---

**From:** RSU50 Supt [mailto:copier@rsu50.org]  
**Sent:** Thursday, September 06, 2018 1:57 PM  
**To:** Elaine; Holly  
**Subject:** Attached Image

Need cost share verification



# MaineDOT

(For MaineDOT Use Only)

Date Application

Received

9/6/2018

Beneficiary's Project ID  
23901.10

Funding Request #

3

## Maine Volkswagen Environmental Mitigation Action Round 1 Application for Appendix D-2 Eligible Actions

- All applications for Round 1 funding are **due by September 15, 2018**.
- A fillable **application template** is available at [www.maine.gov/mdot/vw/application](http://www.maine.gov/mdot/vw/application)
- Use the **list of attachments** in Section 3 to ensure that your application is complete.
- **Funding** approvals for action(s) may be whole or partial.
- A **timeline** for Maine's Round 1 application process can be found at [www.maine.gov/mdot/vw/application](http://www.maine.gov/mdot/vw/application).
- For information on Maine's Diesel Emission Reduction Act (DERA) Program, go to <http://www.maine.gov/dep/air/mobile/cleandiesel.html>.
- For information on Zero Emission Vehicle Supply Equipment (ZEVSE), go to [www.energymaine.com](http://www.energymaine.com).
- Submit any **questions** through the website at [www.maine.gov/mdot/vw/application/faqs](http://www.maine.gov/mdot/vw/application/faqs).
- Information on the **current base price** for Maine school buses can be found at <http://www.maine.gov/doe/transportation/programs/buspurchase.html>

### Section 1: General Information

Action Title: Replacement of Two Class 4 School Buses

Action Location: Town/Territory: RSU 50 - Southern  
Aroostook Community School, Dyer Brook

County: Aroostook

Type of Action: Repower: ☐ Replacement: ☒

Action Proponent: Jonathan Porter, Superintendent of Schools

Action Proponent Mailing Address: 922 Dyer Brook Road

City: Dyer Brook

State: ME

Zip: 04747

County: Aroostook

Daytime Phone: 207-757-8223

Alternate Phone: 207-757-8206

Email: [jporter203@rsu50.org](mailto:jporter203@rsu50.org)

Authorized Agent (if different from Action Proponent): Holly Vining, Business Manager

Authorized Agent Mailing Address: 922 Dyer Brook Road

City: Dyer Brook

State: ME

Zip: 04747

County: Aroostook

Daytime Phone: 207-757-8223

Alternate Phone: 207-757-8206

Email: [hvining@rsu50.org](mailto:hvining@rsu50.org)

## Section 2: Eligibility Criteria

The following categories are **eligible mitigation actions** pursuant to Appendix D-2 of the Environmental Mitigation Trust Agreement ([https://www.maine.gov/mdot/vw/app/Maine\\_VW\\_Eligible\\_Mitigation\\_Actions\\_1-8.pdf](https://www.maine.gov/mdot/vw/app/Maine_VW_Eligible_Mitigation_Actions_1-8.pdf)) and reflect basic eligibility criteria for consideration under this program. See Maine's Beneficiary Mitigation Plan ([www.maine.gov/mdot/vw/BMP\\_final\\_2-12-18.pdf](http://www.maine.gov/mdot/vw/BMP_final_2-12-18.pdf)) for details on eligibility. Check all that apply. Leave checkboxes blank for actions that don't apply. List individual vehicles or equipment using the table on the following page.

Check all that apply	Eligible Mitigation Actions
<input type="checkbox"/>	<b>1992-2009 engine model year Class 8 Local Freight Trucks and Port Drayage Trucks</b> repowered with any new diesel or alternate fueled engine or all-electric engine, or replaced with any new diesel or alternate fueled or all-electric vehicle, with the engine model year in which the eligible large trucks mitigation action occurs or one engine model year prior.
<input checked="" type="checkbox"/>	<b>2009 engine model year or older Class 4-8 school buses, shuttle buses, or transit buses</b> repowered with any new diesel or alternate fueled or all-electric engine, or replaced with any new diesel or all-electric vehicle, with the engine model year in which the eligible bus mitigation action occurs or one engine model year prior.
<input type="checkbox"/>	<b>Pre-Tier 4 freight switcher locomotives that operate 1000 or more hours per year</b> repowered with any new diesel or alternate fueled or all-electric freight switcher certified to meet the applicable EPA emissions standards or other more stringent equivalent state standard.
<input type="checkbox"/>	<b>Unregulated, Tier 1 or Tier 2 marine engines on ferries or tugs</b> repowered with Tier 3, Tier 4, alternate fueled, or all-electric engine, or upgraded with an EPA certified remanufacture system or an EPA verified engine upgrade.
<input type="checkbox"/>	<b>Marine shore power systems or components of such systems</b> that enable a compatible vessel's main and auxiliary engines to remain off while the vessel is at berth. Components eligible for reimbursement are limited to: cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution. Subject marine shore power systems comply with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 high voltage shore connection systems or the IEC/PAS 80005-3:2014 low voltage shore connection systems) and are supplied with power sourced from the local utility grid.
<input type="checkbox"/>	<b>1992-2009 engine model year Class 4-7 local freight trucks</b> repowered with a new diesel, alternate fueled, or all-electric engine, or replaced with any new diesel, alternate fueled, or all-electric vehicle, with the engine model year in which the eligible medium trucks mitigation action occurs or one engine model year prior.
<input type="checkbox"/>	<b>Tier 0, Tier 1, or Tier 2 diesel powered airport ground support equipment; and uncertified or certified to 3 g/bhp-hr or higher emissions spark ignition engine powered airport ground support equipment</b> repowered with an all-electric engine, or replaced with the same airport ground support equipment in an all-electric form.
<input type="checkbox"/>	<b>Forklifts with greater than 8000 pounds of lift capacity and port cargo handling equipment</b> repowered with an all-electric engine, or replaced with the same equipment in an all-electric form.

**Vehicles & equipment proposed for replacement or repower  
under this Eligible Mitigation Action.**  
(Leave fields blank that do not apply)

Current Vehicle Class	Current Tier (if applicable)	Current Model	Current Model Year	Mileage	Current Fuel Type	Proposed Fuel Type	Associated equipment
4		Thomas	2006	151,241	Diesel	Diesel	1537 89.6%
4		Thomas	2007	123,531	Diesel	Diesel	332 53.38%
							79.1%
							854.07

### Section 3: Action Overview and Instructions

The following information provides the reviewers with background on the proposed action and will be considered as part of final decisions on what actions are funded in any given year. If an attachment is not applicable to the proposed action, that action is not disqualified from funding; however, Action Proponents are encouraged to provide accurate and concise answers to as many questions as possible and note why an attachment is not relevant to their proposal.

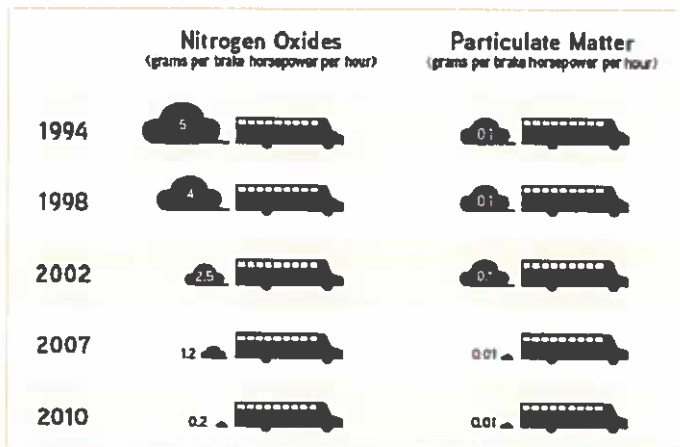
Check if attached	Scoring (for MaineDOT use)	Attachment	Attachment Description
X		A	<b>Mitigation Action Description:</b> Attach a no more than two-page narrative describing the action and how it relates to Maine's Beneficiary Mitigation Plan and label as "Attachment A".
X		B	<b>NOx Emission Reduction:</b> Estimate the NOx emission reductions from the action in terms of dollar per ton of NOx using EPA's Diesel Emission Quantifier found at <a href="https://cfpub.epa.gov/quantifier/index.cfm?action=main.home">https://cfpub.epa.gov/quantifier/index.cfm?action=main.home</a> or for heavy-duty vehicles: <a href="http://afleet-web.es.anl.gov/hdv-emissions-calculator/">http://afleet-web.es.anl.gov/hdv-emissions-calculator/</a> . Attach a <u>separate</u> summary calculation worksheet generated by the Quantifier for <u>each</u> vehicle or piece of equipment and label as "Attachment B".
X		C	<b>Health Benefits:</b> Describe any health benefits <u>maximized</u> by the action <u>beyond</u> calculated NOx emission reductions as "Attachment C". Examples of maximized health benefits include: reductions in particulate matter and/or greenhouse gases; net reduction of diesel fuel use; or idle reduction strategies.
X		D	<b>Action Location:</b> As "Attachment D", indicate whether the action will occur in an area with a disproportionate quantity of air pollution from diesel fleets, such as ports, rail yards, terminals, school depots/yards, and freight distribution areas.
X		E	<b>Class 1 Areas:</b> Using the maps found at <a href="https://www.maine.gov/dep/air/meteorology/class1">https://www.maine.gov/dep/air/meteorology/class1</a> , note the location of the proposed action to indicate whether it will benefit a designated federal Class 1 Area, specifically Acadia National Park, Roosevelt Campobello International Park, or the Moosehorn Wilderness Area located within the Moosehorn National Wildlife Refuge Area. Include the map as "Attachment E".
X		F	<b>Verified Funding:</b> As "Attachment F", verify that the action has secured funding for cost sharing or leveraging by providing a commitment letter or signed agreement from a financial institution or budget committee for cost share or leveraged funding. Also, using the template in Section 4 of this application, include a general project budget indicating the amount of match to be provided by the Action Proponent.
X		G	<b>Action Schedule:</b> The action must be implemented within two years of the award date. Using the template provided in Section 4 of this application, provide schedule and major milestones, labeled as "Attachment G".
X		H	<b>Benefit Period:</b> The action must result in sustained emission benefits over the ten-year Trust Effective Period. Provide a concise description of how benefits will persist through 2027 and a maintenance plan for eligible vehicles/equipment funded under this program as "Attachment H".
X		I	<b>Relevant Experience and Compliance Certification:</b> By signing provisions in "Attachment I", the Action Proponent and Authorized Agent (if applicable) verify that there is existing administration and programmatic structure in place to implement diesel emission reduction or offset actions.

## Attachment A

The Maine Department of Transportation's Maine Beneficiary Mitigation Plan provides schools in Maine with the opportunity to reduce smog-forming nitrogen oxide emissions through the replacement of older, dirtier diesel school bus engines with newer, cleaner models. According to Lewis Bus Group ([www.lewisbusgroup.com](http://www.lewisbusgroup.com)), in addition to the cost effectiveness of diesel fuel, there are a couple of environmental benefits to staying with diesel engines as well:

Diesel emissions at the tailpipe are now more than 90% cleaner than they were ten years ago

### EPA Emissions Standards: 1994 - 2010



In addition, some diesel engines come in well below EPA ratings for particulates as well as below propane emissions ratings for both particulate matter and carbon monoxide.

	Particulate Matter (grams per brake horsepower per hour)	Nitrogen Oxides (grams per brake horsepower per hour)	Carbon Monoxide (grams per brake horsepower per hour)	Nonmethane Hydrocarbon (grams per brake horsepower per hour)
2013 EPA Standard	0.02	0.20	15.5	0.14
<b>Engine Type</b>				
Cummins ISB Diesel	0	0.19	0.2	0.00
Detroit DD5™ (Available 2010)	0	0.09	0.1	0.01
ISB- Nat Gas	0	0.08	2.6	0.01
ISL-Nat Gas	0	0.10	6.0	0.05
ISL-Nat Gas Near Zero	0	0.01	1.5	0.01
Roush V10 Propane	0	0.11	2.8	0.10
Python™ 8.0L V8 Propane	0	0.16	5.6	0.14
Ford V10 Gasoline	0	0.16	3.7	0.05

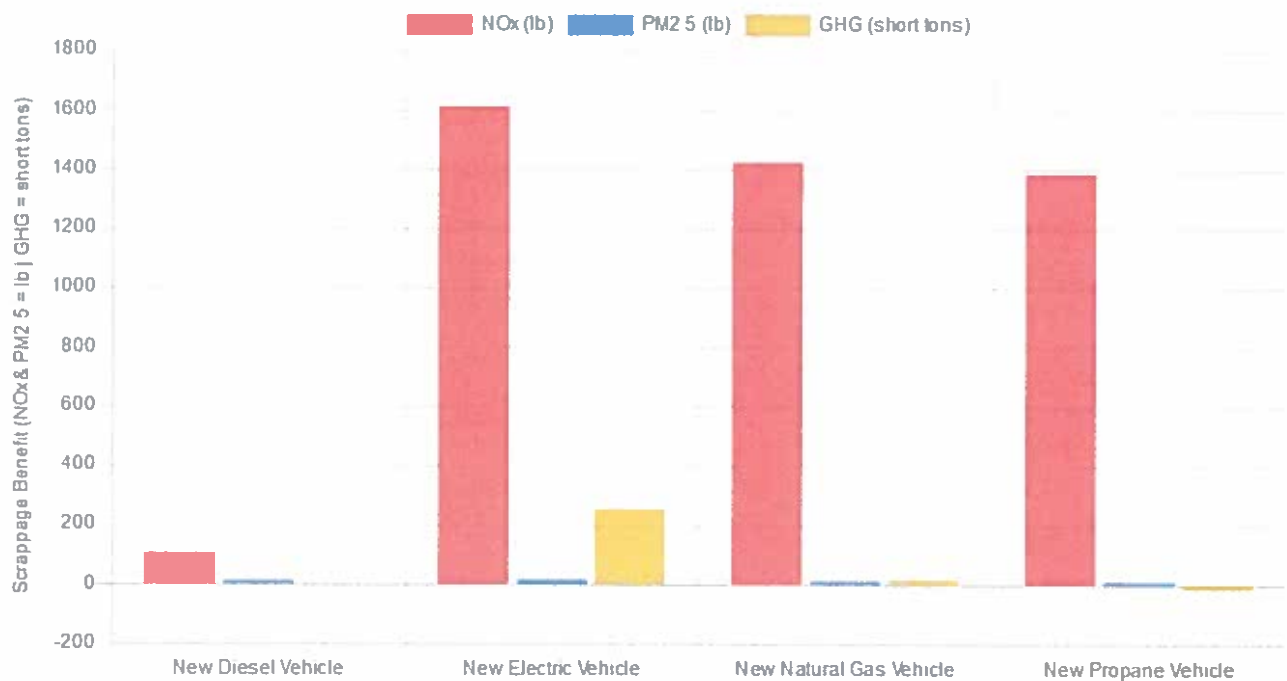
As mentioned in the Beneficiary Mitigation Plan, transportation emissions contribute 62% to Maine's nitrogen oxide emissions. Such pollution leads to serious health conditions (asthma, respiratory illnesses, lung and heart disease), most adversely affecting children and the elderly. Replacement of these two eligible buses in our fleet will help meet the Plan goals by reducing the amount of pollution our buses emit.

In addition to the environmental and health benefits provided from the replacement of our older diesel engine buses, our District stands to benefit economically through this grant application. With roughly 60% of our student enrollment at or below the State's poverty level, we are not a District that can afford to replace school buses without State participation. Maine's Beneficiary Mitigation Plan lists support for local economies as one of the benefits of the plan, aligning greatly with the financial needs of our District.

Attachment B 2006

[About](#)[Vehicle Options](#)**[Results](#)**

Scrappage Emission Reduction Benefit

**New Vehicle Emission Benefits ?**

Pollutant	Diesel	Electric	Natural Gas
NO <sub>x</sub> (lb)	104.43	1,612.23	1,423.76
PM <sub>2.5</sub> (lb)	11.82	17.32	11.82
GHG (short tons)	0.00	252.85	17.34

**New Vehicle Cost Effectiveness ?**

Pollutant	Diesel	Electric	Natural Gas
-----------	--------	----------	-------------

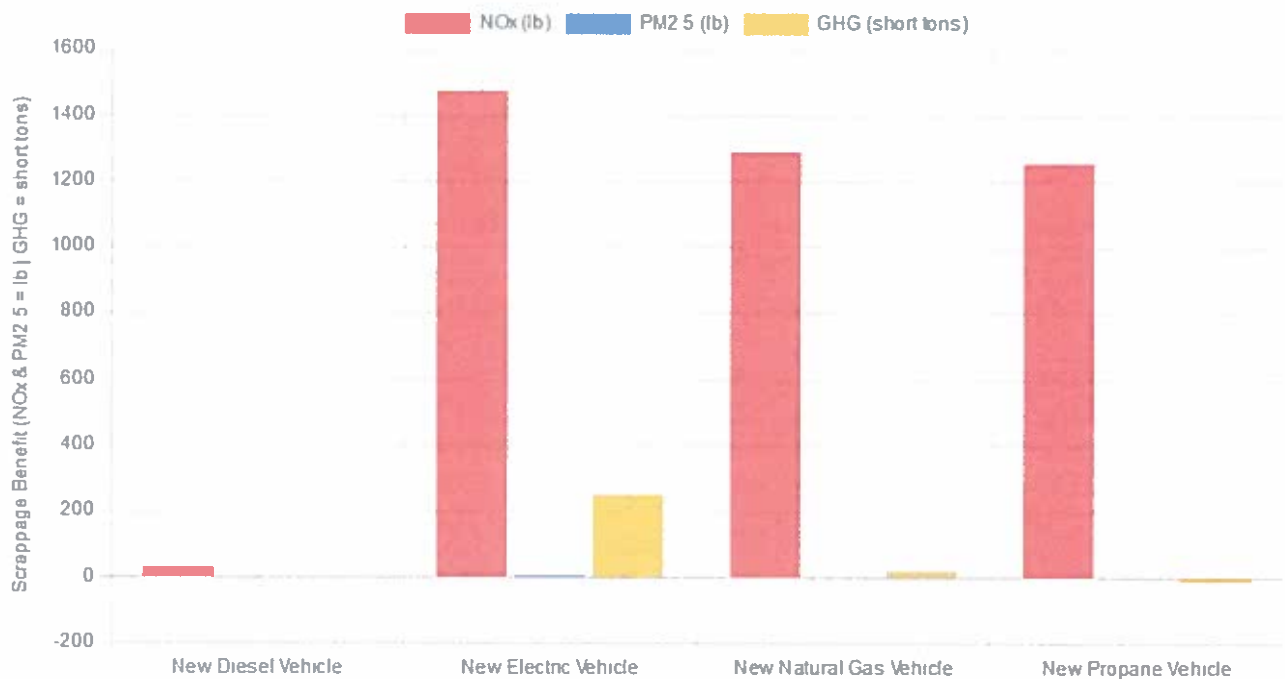
New Vehicle Cost Effectiveness <span>?</span>			
Pollutant	Diesel	Electric	Natural Gas
NO <sub>x</sub> (\$/lb)	\$862	N/A	N/A
PM <sub>2.5</sub> (\$/lb)	\$7,614	N/A	N/A
GHG (\$/ton)	N/A	N/A	N/A

Export Results

Attachment B 2007

[About](#)[Vehicle Options](#)**[Results](#)**

Scrappage Emission Reduction Benefit



New Vehicle Emission Benefits ?

Pollutant	Diesel	Electric	Natural Gas
NO <sub>x</sub> (lb)	27.48	1,471.33	1,290.85
PM <sub>2.5</sub> (lb)	0.41	5.67	0.41
GHG (short tons)	0.00	247.13	16.95

New Vehicle Cost Effectiveness ?

Pollutant	Diesel	Electric	Natural Gas
-----------	--------	----------	-------------

New Vehicle Cost Effectiveness 

Pollutant	Diesel	Electric	Natural Gas
NO <sub>x</sub> (\$/lb)	\$3,275	N/A	N/A
PM <sub>2.5</sub> (\$/lb)	\$219,512	N/A	N/A
GHG (\$/ton)	N/A	N/A	N/A

[Export Results](#)

## **Attachment C**

As shown in the graph on Attachment A, some of the newer diesel engines are releasing particulate matter well below EPA standards and much below what was being emitted 10-20 years ago. Also, the quantifier calculation (Attachment B) shows that particulate matter emissions from scrapping a 2006 or 2007 diesel engine school bus and replacing it with a new one has emissions benefits equal to that of natural gas, which makes diesel both an environmentally safe and viable replacement option for us (all buses in our current fleet have diesel engines).

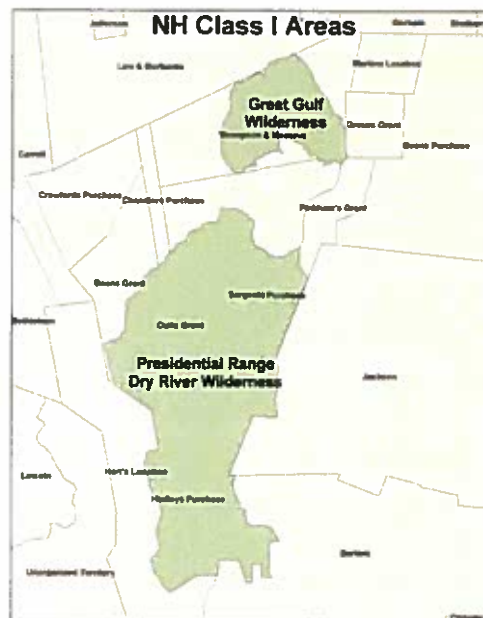
Particulate matter is very fine and can make its way into a person's lungs and blood stream. Prolonged exposure can lead to lung cancer, asthma attacks, chronic bronchitis, and heart disease. New buses, with cleaner diesel engines, will reduce the amount of particulate matter released into the air (near classrooms, bus stops, while people are riding on buses, etc.) exposing children and the general public to significantly less air pollution over time, thus helping to reduce the risk of respiratory illnesses and diseases.

## **Attachment D**

This action will occur at Southern Aroostook Community School, which is a school yard consisting of a fleet of 8 buses all with diesel engines ranging in age from 2006 to 2015.

## Attachment E

Southern Aroostook Community School is physically located in Dyer Brook, Maine. There are seven towns comprising the District (Oakfield, Merrill, Smyrna, Dyer Brook, Island Falls, Crystal, and Hersey). Our buses are primarily operated within this seven-town geographical area, with the exception of field trips and extra- and co-curricular trips. Our District is not in a Class 1 Area; however, we may, on occasion, travel to a Class 1 area.



## Section 4: Templates for use in Attachments F, G and I.

Under this program, there is a minimum **cost share or leverage funding** requirement for non-government and government Action Proponents. Cost shares may consist of municipal, state, federal, or non-VW Environmental Mitigation Settlement private funds. Cost shares for non-government Project Proponents were established by the U.S. District Court in the Environmental Mitigation Settlement and vary per the scope and category of the proposed action. A summary of cost share requirements for non-government Action Proponents can be found in Maine's Beneficiary Mitigation Plan and at [https://www.maine.gov/mdot/vw/app/Maine\\_VW\\_Eligible\\_Mitigation\\_Actions\\_1-8.pdf](https://www.maine.gov/mdot/vw/app/Maine_VW_Eligible_Mitigation_Actions_1-8.pdf). Government Action Proponents for Maine's VW Environmental Mitigation Settlement funds are required to provide a 20% cost share. However, Action Proponents may choose to contribute more than the minimum amount required as a demonstration of the local commitment to the proposed action. Bonus consideration may be given to applications that offer additional cost sharing or leverage funding beyond any required.

### ATTACHMENT F

*As part of Attachment F, include a letter of commitment for balance of base price of vehicle or equipment from a financial institution or authorized financial administrator. Also, complete the following table.*

Budget Summary		
1	Total Estimated Cost of the Proposed Action	\$180,000
2	Minimum required cost share or leverage funding for this action Percentage: Source:	<div>\$ 36,000</div> <div>\$0.00</div>
3	Actual cost share and cost overage committed by the Action Proponent (may include local funding, grants awarded, contributions, etc.) Percentage:	\$0.00
4	Funds requested from Maine's VW Environmental Mitigation Settlement	\$180,000

**Note:** The total of the funds requested from Maine's VW Environmental Mitigation Settlement funds plus the actual non-VW cost share or leveraged funding committed by the Action Proponent must equal the total estimated cost of the proposed project identified on line F-1.

**Note:** The standard fund distribution for selected actions will consist of the cost share or leveraged funding delivered prior to transfer of committed Maine VW Environmental Mitigation Settlement funds, which **will be paid upon proof of completion of the action or vehicle delivery.**

## ATTACHMENT G

The milestones included in this template are provided as guidance. Action Proponents may substitute other milestones that suit their purpose.

Projected Action Schedule	
Milestone	Estimated Date
MaineDOT Requests Round 1 Proposals for Actions to be funded by VW Environmental Mitigation Settlement	9/15/18
Action Proponent or Agent Submits Proposal to MaineDOT	9/15/18
MaineDOT Provides Written Approval of Action Proponent's Proposal	10/31/18
Action Proponent Enters Contract with MaineDOT	11/30/18
MaineDOT verifies funding approval by incorporating Action into Maine Beneficiary Mitigation Plan	12/7/18
Trustee Acknowledges Receipt of Project Certification and Funding Direction	12/14/18
Action Proponent Obtains Cost Share, Notifies or Certifies to MaineDOT	N/A
Action Installation(s)/Delivery	1/31/19
Submit Proof of Delivery or Work Completed to MaineDOT by providing copies of the vehicle title and receipt for vehicle, equipment, or service.	2/8/19
Submit Proof of Scrapping of Replaced Vehicle or Engine to MaineDOT	2/15/19
MaineDOT Remits Committed Funding to Action Proponent	2/28/19
Due date of first Status Report and Maintenance Record to MaineDOT (six months after funding award)	6/30/19
MaineDOT Reports Action Completion to Trustee	12/31/19

## **Attachment H**

Our fleet is maintained by a regional bus garage. Buses are sent to the bus garage to be repaired on an as needed basis; however, we are also required by law to have our buses inspected on a semi-annual basis in February and August of each year. School bus inspections are performed by a licensed State inspector. If a bus does not pass inspection, it is taken off the road immediately and not placed back in service until it has passed inspection. As an additional safety measure, the Maine State Police randomly inspect the physical condition of our buses as well. Any findings during their inspection are addressed immediately. As mentioned above, if the findings cannot be repaired immediately, the buses are taken out of service until repaired. Any bus replaced as part of this application would still be in service in 2027 and would be maintained to the same standards as every other bus in our fleet.

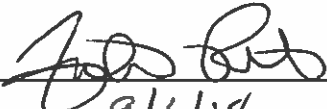
## ATTACHMENT I

### Authorized Agent Certification

The Authorized Agent certifies that they have been authorized by the Project Proponent to submit this application, that the Project Proponent agrees to all the program requirements, and that the information provided is an accurate representation of the project.


Action Proponent's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

  
9/6/18

Authorized Agent's Signature: \_\_\_\_\_  
(if different from Action Proponent)

Date: \_\_\_\_\_

  
9/6/18

---

### Action Proponent Signature

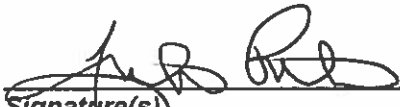
The Action Proponent certifies that the action(s) is/are accurately described in this application. Signature indicates that the action(s) comply with all requirements of the Volkswagen Environmental Mitigation Settlement, provides the designated level of cost share funds, and a willingness to enter an agreement with the Maine Department of Transportation requiring the Action Proponent to administer the project abiding to federal, State, and local requirements. The Action Proponent also accepts responsibility for submitting progress reports during the term of the project and providing future maintenance of the completed action through 2027.

Action Proponent(s): \_\_\_\_\_

Title: \_\_\_\_\_

Phone#: \_\_\_\_\_

Email: \_\_\_\_\_

  
Signature(s)

9/6/18  
Date