

RSU 18 OAKLAND

9/27/18

DIESEL → PROPANE (TYPE C) W/ LOCAL FUELING

CLASS 8 (2) 2004

(2) 2005

## Section 7: Application Scoring Matrix

TYPE D (2) 2006

dog  
LO

Score Assigned	Attachment	Attachment Description
10	A	<b>Mitigation Action Description:</b> Related to Maine's Beneficiary Mitigation Plan
20 avg = 90% \$131,931/TON FOR ALL 6 VEHICLES / \$21,988/VEHICLE 2004 89.4% ↓ 2006 89.4% ↓ 2005 89.4% ↓	B	<b>NOx Emission Reduction:</b> NOx emission reductions estimate using EPA's Diesel Emission Quantifier
10 NO IDLING W/ PROPANE	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.
10 100' FROM MIDDLE SCHOOL	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.
10 TOTAL \$600,000; \$120,000 MATCH REQ = 480,000	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.

CLASS 8 TYPE D

**Gates, Judy**

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**From:** Kristi Farrell <kfarrell@rsu18.org>  
**Sent:** Thursday, September 13, 2018 8:36 AM  
**To:** Gates, Judy  
**Subject:** Maine Volkswagon Environmental Mitigation Action Grant Application-RSU 18  
**Attachments:** RSU 18 VW Grant Application.pdf

Judy,

Please find attached RSU 18's application for the Maine Volkswagon Environmental Mitigation Action Grant. Feel free to contact me if you need additional information.

Thank you.

Kristi Farrell  
RSU #18  
Executive Assistant to the Superintendent  
207-465-7384 ext. 2658



(For MaineDOT Use Only)

Date Application

Received

9/13/18

Beneficiary's Project ID  
23901.10

Funding Request #

8

## 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/vw/application](http://www.maine.gov/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.efficiencymaine.com](http://www.efficiencymaine.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 <https://www.maine.gov/doe/transportation/programs/buspurchase.html>

### Section 1: General Information

Action Title: Class 4-8 School Bus			
Action Location: Town/Territory: Oakland		County: Kennebec	
Type of Action: Repower: <input type="checkbox"/> Replacement: <input checked="" type="checkbox"/>			
Action Proponent: Lennie Goff			
Action Proponent Mailing Address: RSU 18 Transportation, 32 Williams Court			
City: Oakland	State: Me	Zip: 04963	County: Kennebec
Daytime Phone: 207-465-2102	Alternate Phone:		Email: lgoff@rsu18.org
Authorized Agent (if different from Action Proponent): Carl Gartley, Superintendent			
Authorized Agent Mailing Address: 41 Heath St			
City: Oakland	State: Me	Zip: 04963	County: Kennebec
Daytime Phone: 207-465-7384	Alternate Phone:		Email: cgartley@rsu18.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
4-8	Type D	BlueBird	2004	183,584	Diesel	Propane	246892.14 89.6%
4-8	Type D	BlueBird	2004	205,949	Diesel	Propane	221540.49 89.6%
4-8	Type D	BlueBird	2005	191,175	Diesel	Propane	177288.37 89.6%
4-8	Type D	BlueBird	2005	208,896	Diesel	Propane	162998.96 89.6%
4-8	Type D	BlueBird	2006	157,510	Diesel	Propane	164452.58 89.6%
4-8	Type D	BlueBird	2006	191,685	Diesel	Propane	136599.98 89.6%

Fuel at Dead River on KMD



### 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 application 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://www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq">https://www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq</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 Maine map found at <a href="http://www.maine.gov/mdot/vw/application/class1">www.maine.gov/mdot/vw/application/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”**

### **Mitigation Action Description**

Regional School Unit no. 18's Primary Goal for the VW Environmental Mitigation Settlement Funds is to evaluate and review our district's older Class 4-8 Diesel Fuel System buses with high NOx emissions and replace them with new Propane Fuel System Buses.

Our District plan is to work with the Superintendent, the Transportation Director, the Chief Operation Officer and the School Health Coordinator to create a sustainable Plan of Action to support the introduction of Propane Fuel System buses to our district fleet with the expectation that all buses will move toward the reduction of NOx emissions. Our older buses will be scrapped.

Our School Board supports the implementation of our VW Environmental Mitigation Settlement Funds Project to protect human health and improve ambient air quality with the reduction of harmful NOx emissions from our bus diesel engines for our schools and communities in accordance with the Diesel Emissions Reduction Act (DERA).

RSU 18's Transportation Center is located adjacent to Messalonskee Middle School facility. Our location is approximately 100 ft from the Messalonskee Middle School building where exhaust from the bus fleet is directly pointed in the direction of the schools' air intake system. Our Transportation Center location site was once an isolated area away from our school sites. The build of the 10 yr old Messalonskee Middle School and the addition of the Biomass plant has encroached on the space in which our buses can park. Our area is now very small and we just have enough room to get all the buses on our campus site. Our diesel buses possibly poses a health issue for our students, staff and community. Our Transportation Director and staff have made considerable efforts to minimize any adverse effects from the NOx emission. Our focus for our project is to reduce a substantial amount of NOx emissions by replacing our bus fleets to a Propane Fuel System over the next few years.

Our District's Plan of Action Strategies that relates to the Maine Beneficiary Mitigation Plan Goals with the purchase of Propane Fuel System Buses are as follows;

1. Demonstrated staff experience and an existing administrative and programmatic structure in place to implement and achieve NOx reduction
2. Design an infrastructure to replace our diesel, high NOx emission bus fleet with Propane Fuel System buses to achieve the greatest NOx reductions over the coming years through assistance of our school district, MDOE, MDOT, MDEP and the Governor's Energy Office.
3. Expedite deployment of Propane Fuel System Buses within our Transportation System in RSU 18 to support adoption of NOx reduction vehicles and engines that promote NOx reduction by approximately 60% in comparison to conventional diesel engines.
4. Create a plan of action to scrap the diesel fueled buses to reduce harmful emissions from the environment.
5. Maximize our potential to outfit our fleet of buses that will decrease adverse health conditions such as; asthma, respiratory illnesses, worsen existing heart and lung disease especially with our children that increase the number of school nurse visits, emergency room visits, hospital admissions, absences from school and work.
6. Identify potential emission beneficial impact in air quality and maintenance with the purchase of Propane Fuel System buses, such as; decrease of oil consumption from diesel engines 18-30

Quarts to 7 Quarts for Propane engines, no bus idling time, improved bus accelerations, no plugging in buses to warm the engine, less electricity use and burning of clean propane autogas.

7. Elimination of bus components in relations to switching from diesel buses to propane buses, as follows; Charged Air Cooler, EGR Cooler, EGR Valve, Turbo Charger, Dosing Unit, Pre-Oxidation Catalyst, Dosing Module & Control Unit, Heated Supply Line, , Assembly for DEF Tank & DEF Tank, SCR Catalyst, and NOx Sensors & other sensors and assemblies. These components are completely eliminated with buses powered by propane.
8. Economic saving in cost per mile with the installation of Propane Fuel System buses in relations to the Diesel Fuel System buses. Propane autogas cost less per gallon.
9. Improve and protect ambient air quality by implementing our mitigation project that will benefit our transportation center, our schools especially Messalonskee Middle School and our community.
10. Implementation of the RSU 18 project within the two year guideline
11. Create a 10 year Maintenance Plan with sustained emission benefits
12. Achievement of significant and sustained cost effective reduction in NOx emissions from our buses in terms of annual tons of reduction by approximately .79 tons. (Our results were compared to a 2017 model year propane school bus)

The VW Environmental Mitigation Settlement Funds will create an unique opportunity for Regional School Unit no. 18's Transportation Department to upgrade and scrap an aging fleet of buses with high NOx emissions to new Propane Fuel System Buses that adheres to the Maine's Beneficiary Mitigation Plan and DERA.



## **NOx Emission Reduction**

### **“ATTACHMENT B”**

**Regional School Unit no. 18’s estimate for the NOx emission reduction from the action terms of dollar per ton using the NOx EPA’s Diesel Emission Quantifier on the following pages;**

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## Update Project Information

**Project Name** RSU 18 VW Environmental Mitigation Settlement Project **Total Project Funding** \$ 600,000

## Group Name: RSU 18

**Type Onroad** **Engine Model Year 2004** **Fuel Type ULSD**  
**Target School Bus** **Upgrade Year 2019** **Annual Fuel Gallons 4,057**  
**Class or Equipment School Buses** **Remaining Life 4** **Annual Miles Traveled 26,181**  
**Quantity 2** **Annual Idling Hours 270**

## Upgrades to RSU 18

Upgrade	New Model Year	Annual Gallons Reduced	Cost per Unit		Percent Reduction					
			Upgrade	Labor	NO <sub>x</sub>	PM2.5	HC	CO	CO <sub>2</sub>	
Vehicle Replacement - LPG/Propane	2019	4,057	\$100,000	\$0	89.6	98	91.4	91.2	-	

## Group Name: RSU 18

Type Onroad  
Target School Bus  
Class or Equipment School Buses  
Quantity 2

Engine Model Year 2005  
Upgrade Year 2019  
Remaining Life 5

Fuel Type ULSD  
Annual Fuel Gallons 3,419  
Annual Miles Traveled 20,301  
Annual Idling Hours 270

### Upgrades to RSU 18

Upgrade	New Model Year	Annual Gallons Reduced	Cost per Unit		Percent Reduction				
			Upgrade	Labor	NO <sub>x</sub>	PM2.5	HC	CO	CO <sub>2</sub>
Vehicle Replacement - LPG/Propane	2019	3,419	\$100,000	\$0	89.6	98	91.4	91.2	-

### Group Name: RSU 18

Type Onroad  
Target School Bus  
Class or Equipment School Buses  
Quantity 2

Engine Model Year 2006  
Upgrade Year 2019  
Remaining Life 6

Fuel Type ULSD  
Annual Fuel Gallons 4,237  
Annual Miles Traveled 25,603  
Annual Idling Hours 270

### Upgrades to RSU 18

Upgrade	New Model Year	Annual Gallons Reduced	Cost per Unit		Percent Reduction				
			Upgrade	Labor	NO <sub>x</sub>	PM2.5	HC	CO	CO <sub>2</sub>
Vehicle Replacement - LPG/Propane	2019	4,237	\$100,000	\$0	89.6	98	91.4	91.2	-



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## Emission Results and Health Benefits for Project: RSU 18 VW Environmental Mitigation Settlement Project

### Emission Results ☐

Here are the combined results for all groups and upgrades entered for your project.<sup>1</sup>

#### Annual Results (short tons)<sup>2</sup>

	NO <sub>x</sub>	PM <sub>2.5</sub>	HC	CO	CO <sub>2</sub>	Fuel <sup>3</sup>
Baseline for Upgraded Vehicles	1.017	0.087	0.141	0.514	263.5	23,426
Amount Reduced After Upgrades	0.911	0.085	0.128	0.469	263.5	23,426
Percent Reduced After Upgrades	89.6%	98.0%	91.4%	91.2%	100.0%	100.0%

#### Lifetime Results (short tons)<sup>2</sup>

Baseline for Upgraded Vehicles	5.076	0.433	0.702	2.567	1,321.8	117,490
Amount Reduced After Upgrades	4.548	0.424	0.641	2.341	1,321.8	117,490
Percent Reduced After Upgrades	89.6%	98.0%	91.4%	91.2%	100.0%	100.0%

#### Lifetime Cost Effectiveness (\$/short ton reduced)

Capital Cost Effectiveness <sup>4</sup> (unit & labor costs only)	\$131,931	\$1,415,056	\$935,312	\$256,325	\$454	
Total Cost Effectiveness <sup>4</sup> (includes all project costs)	\$131,931	\$1,415,056	\$935,312	\$256,325	\$454	

<sup>1</sup> Emissions from the electrical grid are not included in the results.

<sup>2</sup> 1 short ton = 2000 lbs.

<sup>3</sup> In gallons; fuels other than ULSD have been converted to ULSD-equivalent gallons.

<sup>4</sup> Cost effectiveness estimates include only the costs which you have entered.

Remaining Life

RSU 18: School Bus | School Buses  
RSU 18: School Bus | School Buses  
RSU 18: School Bus | School Buses

4 years  
5 years  
6 years



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# Emission Results and Health Benefits for Project: RSU 18 VW Environmental Mitigation Settlement Project

## Health Benefits

Note: For comparison purposes only. The Health Benefits module data is out of date and will be updated when resources become available.

This section estimates the health benefits resulting from your project's reduction of PM 2.5, based on the inputs you have entered.

You may select up to five counties where the emission reductions will take place and allocate a percentage of the reductions to each of the counties selected. The percentages must total 100 percent.

State	County	Percent
Maine	Kennebec	100
Select State...	Select County..	
Select State...	Select County..	
Select State...	Select County..	
Select State...	Select County..	
Total		100

## Results

The table below shows the estimated PM2.5 reductions and health benefits by county and as a total for your project. Results are based on the inputs you have entered.

Annual Benefits represent the dollar value of health benefits resulting from reduced exposure to PM2.5. These benefits include the reduction of premature mortality, chronic bronchitis, asthma attacks, non-fatal heart attacks, and other health problems. The dollar values are based on studies used by EPA when estimating the health benefits of environmental rules.

Annualized Costs are based on the unit and labor costs you have entered. They have been annualized over the remaining life of the upgraded fleet.

### Health Benefits Results

County and State	Annual Diesel PM2.5 Reduction (short tons)	Annual Benefits	Annualized Unit & Labor Costs
Kennebec, Maine	0.085	\$21,000	-
Total	0.085	\$21,000	\$130,000

## **“ATTACHMENT C”**

### **Health Benefits**

Regional School Unit no. 18's health Benefits maximized by the our planned actions beyond the calculated NOx emission reduction include the following: reduction of air pollution from vehicle emissions, reduction of carbon dioxide emissions from combustion of fossil fuels and vehicle miles traveled; idle reduction strategies with the no idle program; reduction in greenhouse gases; and net reduction of diesel fuel use. Propane Fuel System school buses will assist in reducing harmful emissions from our environment and provide our children who ride the bus cleaner air to breathe daily.

RSU 18 will implement our Project Plan to promote environmental, economic and health benefits for our school district and surrounding communities.

RSU 18's Health Benefits will include;

1. The development of NOx reduction emission vehicle infrastructure to improve air quality in our schools and communities.
2. Progressive elimination of older Diesel Fuel System buses and adoption of cleaner alternative Propane Fuel System buses.
3. Reduction in air pollution for the lifetime of the new school buses especially near Messalonskee Middle School, the Biomass Plant and the Transportation Center.
4. Reduction of NOx emissions with the loading and unloading of school buses at each of our 8 schools at the beginning and end of the school day.
5. Improve and protect the ambient air quality within the communities where the buses travel.
6. Reduce public exposure to diesel particulate matter, which the Environment Protection Agency has classified as a likely human carcinogens
7. Reduce greenhouse gas emissions
8. Reduce need to enforce idle reduction strategies
9. Support of our local economy to promote a healthier environment.

## Action Location

### “ATTACHMENT D”

Location of Messalonskee Middle School to the Transportation Center. As you can see, the exhaust of the diesel buses are pointed to the air intake system of the school. The school bus yard is disproportionately close to the school which bears the brunt of the air pollution from the bus and bus depot.

Aerial View 1



Buses located at the lower end of the pictures are on adjacent business property land.

## Aerial View 2



Buses parked and idling approximately 100 feet from the air intake system at Messalonskee Middle School

Our next Photos are of the buses lining up at the end of the school day to transport students home. As I was taking the photos, I could smell the exhaust of the bus emissions even though I was standing 10 feet away from the convoy of buses as they approached their school destination and parked.



View 1 - Messalonskee Middle School





View 2 - Williams Elementary School



View 3 - Ralph M. Atwood Primary School



## Class 1 Areas

### “ATTACHMENT E”

Regional School Unit no. 18 Transportation Center and district schools are not located within the parameters of the designated Federal Class 1 Area. Our closest school building is in China, Maine. China Middle and Primary Schools are located 79 miles from Acadia National Park and further away from Roosevelt Campobello International Park and the Moosehorn National Wildlife Refuge Area.





## Roosevelt Campobello International Park



## Moosehorn National Wildlife Refuge



## **Attachment F**

Letter of Commitment for balance of base price of buses signed by Gary Smith,  
Business and Financial Director. See the following page.

## ATTACHMENT F

### Verified Funding

#### BUDGET SUMMARY

##### Budget Summary

BUDGET SUMMARY		
Budget Summary		
1	Total Estimated Cost of the Proposed Action	\$600,000.00
2	Minimum required cost share or leverage funding for this action  Percentage: 20%  Source: RSU 18 Budget Bus Allowance	\$120,000.00
3	Actual cost share and cost overage committed by the Action Proponent (may include local funding, grants awarded, contributions, etc.)  Percentage: 20%	\$120,000.00
4	Funds requested from Maine's VW Environmental Mitigation Settlement	\$480,000.00





# Regional School Unit No. 18

41 Heath Street Oakland, ME 04963 ~ Telephone 207.465.7384 ~ Fax 207.465.7384

Carl Gartley  
Superintendent

Keith Morin  
Chief Academic Officer

Gary Smith  
Chief Operations Officer

September 10, 2018

Judy Gates, Director  
MaineDOT Environmental Office  
16 State House Station  
24 Child Street  
Augusta, ME 04333-0016

Dear Ms. Gates,

Regional School Unit No. 18 proudly submits our application for Maine's Volkswagen Environmental Mitigation Action funding. The District has developed and is committed to a sustainable and manageable plan of upgrading and improving our bus fleet by moving to cleaner burning propane fueled buses significantly reduce our NOx emissions.

Regional School Unit No. 18's Board of Directors supports this move towards propane fueled buses. As the District's Financial Officer, I can attest that they are committed to using VW Environmental Mitigation Settlement Funds along with local funding to support this strategy as well as being committed to protecting health and improving ambient air quality by reducing harmful NOx emissions that come from our buses powered by diesel engines.

Working with the RSU 18 Board of Directors, Superintendent, and Transportation Director our top priority in this round of funding would be the replacement of our oldest Class 4-8 diesel fuel burning buses with propane fueled buses. In addition to Round 1 funds, RSU18 has the ability and intent to fund the remaining costs to support this transition in the FY19 and in future year school budgets. This funding would also address over time the infrastructure necessary to properly manage, maintain, and fuel a fleet of buses powered by propane.

Thank you for offering this funding for Maine Schools and for giving RSU 18 an opportunity to improve air quality for students, staff, families and for the communities in which we live in.

Sincerely,

Gary Smith  
Chief Operations Officer  
Regional School Unit 18

## ATTACHMENT G

Projected Action Schedule	
Milestone	Estimated Date
MaineDOT Requests Round 1 Proposals for Actions to be funded by VW Environmental Mitigation Settlement	6/28/2018
RSU 18's Action Proponent Lennie Goff, Transportation Director and Carl Gartley, Superintendent/Authorize Agent Submits Proposal to MaineDOT	9/15/2018
MaineDOT notifies RSU 18's Action Proponent Lennie Goff - Transportation Director, of successful Round 1 Proposal for Action.	10/31/2018
RSU 18's Action Proponent Lennie Goff, Transportation Director and Carl Gartley, Superintendent/Authorize Agent Signs Contract with MaineDOT	11/30/2018
MaineDOT verifies funding approval by incorporating Action into Maine Beneficiary Mitigation Plan	12/07/2018
Trustee Acknowledges Receipt of Project Certification and Funding Direction	1/15/2019
Transportation Director and Chief Operations Officer obtains Cost Share and Notifies and Certifies to MaineDOT	1/31/2019
Transportation Director places the order for the first set of 3 buses	1/31/2019
Action Installation(s)/Delivery of first 3 buses	5/15/2019
Due date of first Status Report and Maintenance Record to MaineDOT (six months after funding award)	5/30/2019
Transportation Director place the order for the second set of 3 buses	6/01/2019
Action Installation(s)/Delivery of second set of 3 buses	7/01/2019
Transportation Director will Submit Proof of Delivery and Work Completed to MaineDOT by providing copies of the vehicle title and receipt for buses.	7/15/2019
Transportation Director will Submit Proof of Scrapping of Replaced Vehicle to MaineDOT.	7/15/2019
MaineDOT Remits Committed Funding to RSU 18 for buses.	7/15/2019
Due date of final Status Report and Maintenance Record to MaineDOT	8/31/2019
MaineDOT Reports Action Completion to Trustee	8/31/2019

## **ATTACHMENT H**

### **Benefit Period**

Regional School Unit no. 18's primary action for the VW Environmental Mitigation Settlement Funds is to support the replacement of the old Diesel Fuel System buses to new Propane Fuel System buses. The new Propane Fuel System buses sustained emission benefits will include the following;

1. Decreased NOx emissions
2. Reduced emission near the vicinity of our school facilities.
3. Less parts, less maintenance
4. Eco-friendly before and after combustion, which means that propane autogas is environmentally safe
5. Low-carbon alternative fuel that produces significantly fewer greenhouse gas emissions than electricity and many other fuels.
6. Propane autogas has a lower carbon content than diesel.
7. Propane is a safe, reliable and clean energy source.
8. Propane Fuel is widely available even in our rural areas
9. Cost less than diesel fuel - less fuel cost per mile
10. Lower maintenance cost
11. Local delivery system of propane fuel with the future installation of a fuel delivery stations at the district level
12. Easy deployment of the buses
13. Training for bus maintenance is less

Our installation of new Propane Fuel System buses will result in sustained emissions benefits over the ten-year Trust Effective Period. Our Maintenance Plan will include;

- Regular maintenance of the bus at every 5,000 mile junction.
- Regular oil, filter, grease, brake adjustment, check of fluids and general inspection of bus every 5,000 miles.
- Tire rotation every 2,500 miles
- Maintenance plan that will schedule bus for maintenance based on miles traveled.
- Yearly professional development and training for mechanic staff and bus drivers
- Ongoing data collection with Versatrans Fleetmaster software program for the use of the propane fuel system buses over the ten year period and beyond.
- Bi-annual inspection by mechanics and also by Maine State Motor Vehicles Inspection Unit Commercial Division Unit.

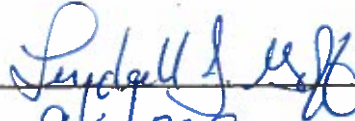
## ATTACHMENT I

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

  
9/6/2018

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

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

  
9/13/18

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### 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.

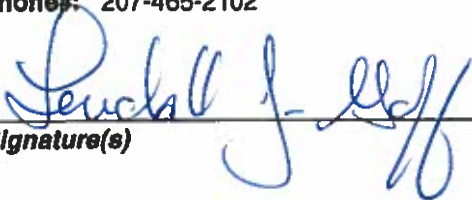
Action Proponent(s): Lennie Goff

Title: Transportation Director

Phone#: 207-465-2102

Email: lgoff@rsu18.org

Signature(s)



Date

9/6/2018