Sandman Consolidated School 838 Seashore Road Cape May, NJ 08204 Telephone: (609) 884-9410

(609) 884-9412

LOWER TOWNSHIP ELEMENTARY SCHOOL DISTRICT **BOARD OFFICE**

905 SEASHORE ROAD CAPE MAY, NEW JERSEY 08204 Villas, NJ 08251 Fax:

Telephone: (609) 884-9430 (609) 886-0515

Memorial School

2600 Bayshore Road

Maud Abrams School 714 Townbank Road Cape May, NJ 08204 Telephone: (609) 884-9420 (609) 884-9421 Fax:

TELEPHONE: (609) 884-9400 FAX: (609) 884-1821 www.lowertwpschools.com

Carl T. Mitnick School 905 Seashore Road Cape May, NJ 08204 Telephone: (609) 884-9470 (609) 884-9481

To Whom It May Concern,

The Lower Township School District appreciates the opportunity to present our response for the grant funding opportunity with the New Jersey Volkswagen Environmental Mitigation Trust Program. We are looking forward to being selected for four (4) all-electric Type C school buses. The Lower Township School District is responding to this Project Solicitation with the hope to accelerate adoption and deployments of zero-emissions vehicles in New Jersey; thus improving the lives of our students, faculty and citizens in the State of New Jersey.

The Lower Township School District is a comprehensive community public school district that serves students in Preschool through sixth grade, from Lower Township, in Cape May County New Jersey. For seventh through twelfth grades, public school students attend the schools of Lower Cape May Regional School District. The Lower Township School District is classified by the New Jersey Department of Education as being in District Factor Group "B", the second lowest of eight groupings as ranked by socioeconomic status. The District also participates in the Interdistrict Public School Choice Program, which allows non-resident students to attend the district's schools without cost to their parents, with tuition paid by the state.

Our commitment to continuous growth and improvement is a hallmark of Lower Township Elementary Schools. The district implements a curriculum built on the Common Core State Standards, and the New Jersey Core Curriculum Content Standards. Our district strives to build self-respect and strong character through a social skills program which instills respect for diversity and empathy for others through the use of consistent rules and routines throughout the district. The district is ahead of the three-year technology plan timetable and anticipates equipping all kindergarten classrooms with interactive whiteboards. In addition to classroom improvements, the district has made significant energy improvement updates by reducing our energy consumption and connecting to the solar fields, located across the street from one of our schools, Carl T. Mitnick, which draws electricity to power the school.

For the deployment of our all-electric school buses, the Lower Township School District will be partnering with The Lion Electric Co. (Lion), Lion's authorized dealer and Clipper Creek - charging infrastructure vendor, to supply our region with all our fleet electrification needs. To date, our equipment manufacturing partner, The Lion Electric Co. has over 300 electric school buses deployed in North America, with 6,000,000 proven and driven miles on its current batteries, electric components and heavy-duty chassis. All associated performance data has been traced and documented. Designing, building and delivering electric heavy-duty vehicles is Lion's daily mandate; their experience and success will reflect on the Lower Township School District, through measurable performance, real-life client references, 100% on-time deliveries and way beyond the "early adopter" experience.

The Lower Township School District strongly supports the Volkswagen Project Solicitation and thanks the New Jersey Department of Environmental Projection for its work to date on zero-emission vehicle implementation. We hope that our response will successfully demonstrate that the Lower Township School District can fulfill New Jersey's goals by delivering and operating quality, zero-emission vehicles in a short amount of time.

We look forward to working with the New Jersey Department of Environmental Projection to implement this project.

Sincerely,

School Business Administrator/ Board Secretary Lower Township School District



State of New Jersey

PHILIP D. MURPHY
Governor

Department of Environmental Protection

CATHERINE R. McCABE

Commissioner

SHEILA Y. OLIVER
Lt. Governor

PROJECT PROPOSAL

OVERALL GOAL

The State of New Jersey, as a beneficiary of the Trust established pursuant to the national Volkswagen settlement, intends to use its allocation from the mitigation trust to efficiently implement projects that reduce oxides of nitrogen (NOx) emissions in a cost effective and technically feasible manner. The implemented projects must meet the criteria of the Consent Decree. New Jersey is issuing this solicitation for project ideas to ensure a broad range of project ideas are considered.

NJDEP anticipates primarily funding pilot electrification projects, including the replacement of heavy-duty vehicles/engines such as buses, trucks, and non-road equipment in urban areas disproportionately impacted by diesel emissions, as well as electric vehicle charging/fueling infrastructure installation in strategic locations across the state.

Submissions must contain all the information outlined in the "Project Proposals" section of this document.

ELIGIBLE PROJECTS

A general summary is below. Click here for comprehensive list and associated definitions.

Source Category	Emission Reduction Strategy	Allowed Expenditure Amount			
1. Class 8 local freight trucks & port drayage trucks Repower and replacement		Up to 40% for repower with diesel or alternative fuel or up to 75% (up to 100% if government owned) for repower with electric. Electric charging infrastructure costs are an eligible expense. Up to 25% for replacement with diesel or alternative fuel or up to 75% (up to 100% if government owned)			
		for electric replacement. Electric charging infrastructure costs are an eligible expense.			
2. Class 4-8 school bus, shuttle bus or transit bus	Repower and replacement	Same as row 1			
3. Freight switching locomotives	Repower and replacement	Same as row 1			
4. Ferries/Tugs	Repower	Same as row 1			
5. Oceangoing vessels	Shorepower	Up to 25% for shore side infrastructure if non-government owned (up to 100% if government owned)			

Source Category	Emission Reduction Strategy	Allowed Expenditure Amount
6. Class 4-7 local freight trucks	Repower and replacement	Same as row 1.
7. Airport ground support equipment	Repower and replacement	Up to 75% to repower or replace with electric (100% if government owned). Electric charging infrastructure costs are an eligible expense.
8. Forklifts and Port Cargo Handling Equipment	Repower and replacement	Up to 75% to repower or replace with electric (100% if government owned). Electric charging infrastructure costs are an eligible expense.
9. Electric vehicle charging stations or hydrogen fueling stations for light duty vehicles only		Up to 100% to purchase, install and maintain infrastructure if available to public at government owned property. Up to 80% to purchase, install and maintain infrastructure if available to public at nongovernment owned property. Up to 60% to purchase, install and maintain infrastructure at a workplace or multi-unit dwelling that is not available to the general public. Up to 33% to purchase, install and maintain infrastructure for publicly available hydrogen dispensing that is high volume or 25% for lower volume.

PROJECT PROPOSALS (Open with Adobe Reader)

Electronic submittals are preferred and should be sent to WComments@dep.nj.gov, however paper submittals will also be accepted and should be sent to:

NJDEP Division of Air Quality Mail code 401-02E Trenton, NJ 08625-0420 Attn: VW Settlement

To enter information electronically, use Adobe Reader

CONTACT INFORMATION

SOLVELLE IN CHARLETON					
Applicant Name	Lower Township School District				
Applicant Address	905 Seashore Road				
City, State, Zip Code	Cape May, New Jersey, 08204				
Contact Person	John Hansen				
Title/Position	School Business Administrator/ Board Secretary				
Phone	(609) 884-9400 ex 2605				
E-mail	jhansen@lowertwpschools.com				
Owner Name	Lower Township School District				
Owner Address	905 Seashore Road				
City, State, Zip Code	Cape May, New Jersey, 08204				
Contact Person	Jeff Samaniego				
Title/Position	Superintendent				
Phone	ex 2650				
E-mail	jsamaniego@lowertwpschools.com				

PROJECT NAME	Lower Township School District - Electric School Bus Pilot Project							
PROJECT CATEGORY OR CATEGORIES (choose from 1-9 in "Eligible Projects" section above)								
2 🔳	3 4 5 6 7 8 9							
PROJECT PRIORIT If submitting more tha	TY Priority # 1 of 1 proposals n one proposal, what is the sponsor's priority of this proposal?							

NOTE FOR CATEGORY 9 PROPOSALS

If your proposal is for Category 9 (Light Duty Zero Emission Vehicle Supply Equipment), follow these instructions:

<u>Electric Vehicle stations</u>: Do not complete this form. Instead, go to <u>It Pay\$ to Plug In - NJDEP's Electric Vehicle Charging Grants Program</u>, and apply for a Charging Grant. Volkswagen funds for charging stations will be administered through *It Pay\$ to Plug In*.

Hydrogen fuel cell vehicle supply equipment: Complete all of the questions on this form.

PROJECT BUDGET

Provide total estimated project budget, include source, amount of cost share, and administrative costs if applicable:

The amount of grant request is 100%.

The total estimated project budget will be \$1,477,208.00 for the purchase of four (4) all-electric school buses and four (4) charging stations, and the cost of the charging infrastructure installation.

PROJECT DESCRIPTION (Briefly describe the project by completing the following questions)

The Lower Township School District will see four (4) diesel school buses, from our current fleet, scrapped and rendered inoperable. These school buses will then be replaced with four (4) all-electric, zero-emission, Type C school buses from The Lion Electric Co. For the purposes of this application we have included the necessary information for each vehicle that we will be scrapping on a separate PDF page further down in our application. Below you will find the information for 1/4 buses that we will be scrapping.

Geographic area where emissions reductions will occur? Cape May County

Estimated size of population benefitting from the emission reductions? 92.039

Estimated useful life of the project? Maximum of 15 years

Number of engines/vehicles/vessels/equipment included in the project? Four (4) all-electric school buses

DEP will be modeling emission benefits for all projects. Please provide the necessary information below:

Model Year XXX

Horsepower XXX

Annual hours of use XXX

Annual amount of fuel used XXX

Will the project benefit one or more communities that are disproportionately impacted by air pollution? If so, please describe?

The project will benefit Lower Township and Cape May County. Although the air quality in the State of New Jersey has improved, it still ranks among the worst in the nation because of high concentrations of ground-level ozone pollution, according to the American Lung Association. In 2017 the American Lung Association did not have any data reported for Cape May County. However, the county is bordered by Atlantic and Cumberland counties, which were deemed "C" counties in the American Lung Association's 2017 State of the Air Report. Currently there are no air monitoring sations in Cape May County, therefore the state of our air is unknown. We are unaware of the number of "orange alert days" in the county. That said, we have a total of 16,215 children under the age of 18 living in the county who are at risk of high ozone pollution, and of that number 1,715 of them suffer from pediatric asthma.

Only shovel ready projects will be considered. Please list project partners.

The following project partners will be involved in this project: Lower Township School District, The Lion Electric Co. – original equipment manufacturer, Clipper Creek – electric vehicle charging infrastructure vendor, and The Lion. Electric Co. licensed dealer – H.K. Truck Center.

Estimated timeframe for implementation? Include a project timeline that identifies start and end dates, as well as the timeline for key milestones.

Project Period // We will take possession of our vehicles 180 days after a purchase order has been emitted to The Lion Electric Co. licensed dealer for the purchase of four (4) Lion C all-electric school buses. Lion is committed to deliver quality products as quickly as possible based on the grant response.

Demonstrated success in implementing similar projects?

Sustainability is one of our main priorities at the Lower Township School District. In 2017 we developed a \$1.8 million dollar Energy Savings Improvement Plan, which is self-funded and generates \$102,379 in annual energy savings. The sustainable programs that we currently implement include energy conservation (LED lightning retrofit), district-wide energy management system, ground source geothermal heat pumps, water conservation, combined heat and power. As mentioned in our cover letter, one of our elementary schools, Carl T. Mitnick, is powered by solar energy, from a solar field project, located across the street from the school.

If your proposed project involves alternative fuels, provide a demonstration of current or future plans to provide adequate refueling infrastructure.

As these will be our first zero-emission vehicles we are very confident in our equipment manufacturer, The Lion Electric Co., capabilities and proven success in implementing and demonstrating success with similar projects.

Lion has deployed over 300 electric school buses, with more than six million miles of service and counting, including leading the world's largest deployment of zero-emission school buses in the US. They are global leaders in commercializing zero-emission heavy-duty vehicles and the only manufacturer to have proven capable of Vehicle-to-Grid. Lion is in a unique position to have operating data and a history of advancing technology as other OEM's are just beginning their zero-emission journey. Students across America ride Lion buses safely to-and-from school when it is in session. Lion is the most experienced in the deployment of heavy-duty electric vehicles field starting with on-time delivery, to customer service, and infrastructure support.

Has your organization been approved to receive and expend any other grant funds related to this project? If so, please provide details.

We will solely apply for this funding opportunity to replace our diesel vehicles with all-electric school buses.

Please provide any additional information that supports this project.

Our all-electric school buses will be used for daily route service. This is because our District is comprised of elementary schools only. The school buses would be responsible for servicing elementary students within the district, and most live within the Township. As our township is small compared to others in the State, our buses are on the road for the same number of hours as a three-tiered district, thought they travel a minimal distance when picking up and dropping off our students.

Understanding that changes may be coming to the 2020-2021 school year, never has the health and safety of our students been more important. By eliminating the diesel buses from our fleet and replacing them with zero-emission options, we believe that these buses will be welcomed with great appreciation from the parental community of our students.

These zero-emission school buses will fit perfectly into our daily routes because they will mimic what our scrapped diesel buses would have accomplished but without the extra fumes and incurred costs. The bus will charge overnight during non-peak hours and may be charged mid-day if needed, therefore reducing our operational costs.

The utilization of these new school buses will also reduce our maintenance costs by about 60% and energy costs up to 80% based on our preliminary evaluation. This is since the buses have no fuel, no transmission and very few moving parts. With the help of the New Jersey Department of Environmental Protection, our return on investment will occur in a minimal time frame while allowing us to significantly reduce greenhouse gas emissions while providing economic and environmental benefits to our

community. In fact, one bus will reduce the amount of CO2 in the air by approximately 25 tons per year and will also reduce the noise pollution in the area.

Two additional pages have been provided as supplemental space to answer any of the questions above.

Supplemental Page 1

Investing in a Lion vehicle will allow us to track our progress by calculating our average consumption through the smart charging system, and collect data through the onboard telematic touchscreen, which is unique to Lion vehicles. The operator will simply select their charging preferences through the screen to maximize charging efficiency. The onboard touch screen will serve many purposes to our operators: it registers power usage, driving efficiency through the driving interface, maintenance interface, battery state, charging interface, parameters, smart charge, and preheat. All information on the onboard touchscreen is recorded and can be extracted as a report on a regular basis to perform multiple analyses and to understand the efficiency and cost of each electric bus.

The vehicles are also equipped with electronic modules that monitor and record data from various systems, including the motor, batteries, braking, and electrical systems. The electronic modules record information about various driving and vehicle conditions, including braking, acceleration, trip distance and other related information regarding the vehicle. These modules record information about the vehicle's features such as charging events and status, the enabling/disabling of various systems, diagnostic trouble codes, VIN, speed, direction, and location.

The success of the project will be enhanced by the number of miles driven per year on the all-electric buses. The more we will use the buses, the more we will save and the better it will be for our environment and community. We will be the grantee of this grant and will operate the buses daily while analyzing the reports generated by the vehicles.

In our case, electric school buses are new to us and we will require the necessary training to help bridge our knowledge gap from diesel to electric. To ensure that our operators are comfortable using the new all-electric school buses, they will take part in the Lion Academy Training Program. The training program will be available to a wide range of stakeholders, and most importantly our transportation professionals. The training curriculum will be extremely detailed and can last up to six hours to ensure that all parties are comfortable working on the buses once they are delivered and operational. The interactive classes cover various topics such as safety, troubleshooting, electric chargers, EV components, maintenance, repairs, warranty work, driver tips, accessories, etc.

Supplemental Page 2 Conclusion//

As leaders in manufacturing and deploying zero-emission school buses and charging infrastructure equipment, The Lion Electric Co., their licensed dealer, and Clipper Creek are poised to immediately support the Lower Township School District. It is our strong desire to scrap four high pollutant diesel buses and replace them with zero-emission vehicles and the necessary charging infrastructure.

Having a shared goal of improving air quality and the health of children in all communities is what best aligns us and our project partners. Not only do our partners value focus on safety and reliability, but also the health of the communities we serve. They have invested early and deeply to develop a zero-emission technology that supports the communities in which we serve and live.

With help from the Department of Environmental Protection this program will help us to permanently remove the previously mentioned high pollutant diesel vehicles that are currently operating in our fleet, which our students, faculty and community are presently exposed to. Additionally, it will give us the opportunity to pave the way for other educational institutions to join the electrification movement.

We would like to thank the Department of Environmental Protection in the State of New Jersey for allowing us to submit a project proposal for the Volkswagen settlement funds. We look forward to working with this Department so that we may be able to provide a healthy breathing environment to students, faculty and the communities we serve.



QUOTE

Quote No.

LIONC_LTSD_20200718

Date

2020-07-18

Customer Name

John Hansen

Company

Lower Township School District

Address

905 Seashore Road

City

Cape May

State

New Jersey

ZIP

8204

Phone

(609) 884-9400 ex 2605

Email

jhansen@lowertwpschools.com

	Model	Range	Unit Price	Quantity	Total
LION C 2020	AA7_AC	100 mi.	\$ 359,302.00	4	\$ 1,437,208.00
Capacity / Pass.	54				
Options - Sub-Total (See	Page 2)		\$ -	4	\$ -
Tax		0.000%	\$ -	4	\$ -
Subtotal with tax			\$ 359,302.00	4	\$ 1,437,208.00
Total (Incl. tax)			\$ 359,302.00		
Select Purchase Incentiv	es / Grants		\$ (359,302.00)	4	\$ (1,437,208.00)
Select Superseded Purchase Incentives / Grants*			\$ -	4	\$ -
SCHOOL DISTRICT BALANCE DUE TO VENDOR			\$0.00	<u>4</u>	\$0.00

Black wheels and black bumpers included

Approximate Delivery Date 120-180 Days After Receipt of P.O.

Customer Signature Indicating Acceptance of Quote:

Title/Position:

Lion Authorized Dealer

TRUCK CENTER

Date:

*Note: Price subject to change upon final P.O. acceptance

Quote valid for 90 days



QUOTE - Page 2

Quote No.

LIONC_LTSD_20200718

Date

2020-07-18

OPTIONS

Options Description	Quantity	Price
BUMPERS - BLACK	1	INCLUDED
WHEELS - BLACK	1	INCLUDED
PRE-WIRE - 2-WAY TRACE/PULL LINES ONLY	1	INCLUDED
PRE-WIRE - CAMERA TRACE/PULL LINES ONLY - AT REQUESTED LOCATION	1	INCLUDED
Select Option	Quantity	Amount

Options Total	\$ -

LIONC - BASE SPECIFICATIONS*

*Specs to be compliant with New Jersey specification requirements

GROSS VEHICLE WEIGHT RATING (GVWR) 30,000 lbs.
SEAT ROWS Up to 12 rows

PASSENGER CAPACITY 54

BODY WIDTH 96 in.
HEADROOM 78 in.
TIRE AND RIM 11R22.5

CHARGE PORT FRONT (STANDARD)

REGENERATIVE BRAKING SYSTEM STANDARD RANGE 100 mi.

HIGH VOLTAGE BATTERIES LITHIUM-ION (NMC)

AC CHARGING ON-BOARD CHARGER - 19.2 kW

SOUND GENERATOR STANDARD (0-20 MPH)

12 V BATTERIES 2 X 950 CCA

BRAKE SYSTEM HYDRAULIC DISC BRAKES FRONT & REAR TOW HOOKS STANDARD

POLYETHYLENE STEPWELL STANDARD POLYETHYLENE BATTERY BOX, TRAY AND WHEELHOUSES **STANDARD** COMPOSITE REAR EMERGENCY DOOR **STANDARD** COMPOSITE ABS EXTERIOR BOW CAP **STANDARD** INTEGRATED TRASH CAN **STANDARD** ONBOARD TOUCHSCREEN (TELEMATICS, STATS AND DIAGNOSTICS; STANDARD SMART CHARGE STANDARD PREHEAT SETTING **STANDARD** CHARGING INDICATORS AS CLEARING LIGHTS **STANDARD** CHARGE READY PILOT LIGHT **STANDARD** ON/OFF MASTER DISCONNECT SWITCHES **STANDARD** PRE-WIRE TRACE/PULL FOR CAMERA & 2WAY **STANDARD CUP HOLDER STANDARD EXTERIOR LED LIGHTS STANDARD** INTERIOR LED LIGHTS **STANDARD**

ELECTRIC HORNSTANDARDMIRRORSREMOTE & HEATEDFLAPSSTANDARD

CERTIFICATE HOLDER STANDARD
VISOR ACRYLIC, ADJUSTABLE
STOP ARM LED STOP ARM - FMVSS

REFLECTIVE MARKINGS
PER FMVSS
SCHOOL BUS SIGNS
PER FMVSS

FLOOR PLYWOOD / BLACK FLOORING

HEATING AUXILIARY HEATER

WINDOWS TINTED

ROOF WHITE COMPOSITE
BODY PANELS YELLOW COMPOSITE
RUB RAILS BLACK STEEL

BRAKES BRAND & MODEL MERITOR, WABCO

TIRE BRAND

DRIVER SEAT

PASSENGER SEATS

BF GOODRICH OR EQUIVALENT

GREY CLOTH - WITH - ARM REST

39 in. - GREY - HIGH BACKS

SEAT BRAND & MODEL HSM
TRI-KIT STANDARD
FIRST AID KIT STANDARD
FIRE EXTINGUISHER STANDARD
CHILD CHECK MATE STANDARD
CUP HOLDER STANDARD

DRIVER JACKET HOOK RADIO & 4 SPEAKERS STANDARD STANDARD



John Hansen <jhansen@lowertwpschools.com>

Application walk through (Lower Township x Lion)

Sun,

 kelly hewitt
 kelny hewitt
 <td

Hi Jillian

Please see below info requested. Thank you!

Existing Vehicle							Replacement Vehicle			
Vehicle Number	Make/ Model	Serial Number	Model Year	Horsepower	Annual Hours	Annual Fuel (gallons)	Replacement Model Year	Replacement Fuel Type	Replacement Cost	Chargin Infrastruct
1	Thomas/FS65	4UZAAWDD77CW40020	2007	190-250	990	2295	2021	All-electric		\$10,
2	Thomas/FS65	4UZAAWDD07CW40019	2007	190-250	990	2120	2021	All-electric		\$10,
3	Thomas/FS65	4UZAAWDD06CU61428	2006	190-250	990	4226	2021	All-electric		\$10,4
4	Thomas/FS65	4UZAAWDD26CU61429	2006	190-250	746	2027	2021	All-electric		\$10,
	:							Totals:	\$-	\$40,

On Fri, Jul 17, 2020 at 1:55 PM Jillian Safian < Jillian.Safian@thelionelectric.com> wrote: [Quoted text hidden]

[Quoted text hidden]