

2022 North Carolina VW Settlement Program

Phase 2 School Bus Program Application

This is a representation of the application information submitted by the applicant in the DAQ Grants Management System. Required application attachments and the original application are available to view in the DAQ Grants Management System.

Applicant Contact Information

Project Title	
Native Electric	
Organization Name	
Eastern Band of Cherokee Indians	
Organization Mailing Address	
City, State Zip	
Authorized Representative Name	
Authorized Representative E-mail Address	Authorized Representative Phone Number
Project Manager Name (primary contact)	
Project Manager E-mail Address	Project Manager Phone Number
Financial Contact Name	
Financial Contact E-mail Address	Financial Contact Phone Number

Project Details

Program Type	Eligible Applicant Type
School Bus Program	Government
Vehicle/Equipment Type	Project Type
Class 4 -8 School Bus Replacement (EMA-2a)	Vehicle Replacement - All Electric

Project Location (where equipment will be installed and/or used)

Street Address		
City	County	Zip
Cherokee	Swain	28719



Project Details (Questions 1-5 are required.)

1. Please provide a detailed description of the proposed project.

The Eastern Band of Cherokee Indians (EBCI) will provide a sub award agreement with the Cherokee Boys Club (CBC) sub recipient, which is the EBCI affiliation that provides the school bus services to the Cherokee Central School System (CCSS) and EBCI community. This collaboration will be to replace a 1998 International 3800 diesel school bus with a Thomas Saf-T-Liner C2 310TS electric bus. The EBCI will own the bus and the CBC will operate and maintain the bus. This pilot project "Native Electric" will test the feasibility of operating electric school buses in the mountains of WNC. The EBCI is located in WNC, with lands in Swain, Jackson, Cherokee, and Graham counties. The EBCI land base is 62,000 acres consisting of deeded and trust lands. The main boundary, also known as Qualla Boundary, is about 56,000 acres and is where the town of Cherokee is located. The total EBCI membership is approximately 15,763 members with about 8,194 members residing on EBCI lands. The Qualla Boundary is surrounded by several Clean Air Act Class 1 Areas including the Great Smoky Mountains National Park, Shining Rock and Joyce Kilmer/Slickrock Wilderness and Linville Gorge. These Class 1 Areas are required by federal law to have the highest level of protection from air pollution. This proposed project will test a new clean transportation technology that has the potential to significantly reduce NOx (285 lbs of NOx annually - Duke Energy) and other harmful emissions and protect very sensitive natural resources and view-sheds. The EBCI have long been stewards of the land and have made it a priority to preserve and protect the environment. The EBCI has a Natural Resources Program, which carries out the environmental protection and management components for the Tribe. The offices housed within Natural Resources Program are: Air Quality, Water Quality, Fisheries and Wildlife, Regulatory, Forestry, and Horticulture. The EBCI Air Quality Office (AQO) started monitoring ambient air in 2000 for compliance with the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) section 105 per the Treatment as a State status with the Environmental Protection Agency (EPA). Currently, EBCI is the only Tribe within EPA region 4 with a continuous air monitoring program. EBCI AQO monitors for particulate matter and ozone. In addition to monitoring, the EBCI AQO also engages in projects that will contribute to air pollution reduction within EBCI lands and the surrounding area. Some of the past projects focusing on reducing air pollution were diesel particulate filter installation, implementation of a biodiesel production facility, a woodstove changeout project, alternative energy installation at the visitor centers (solar PV, solar hot water, and wind turbine), an electric vehicle fleet addition, and a mobile monitoring system. A major focus point for EBCI air pollution reduction is mobile emissions, due to the rural location of EBCI lands and mobile sources being the primary contributor of nitrogen oxides (NOx), which is an ozone precursor. The Native Electric pilot project will help EBCI continue to work towards emissions reduction and environmental protection to help reduce the major health hazards that diesel exhaust poses to the Cherokee community.

2. Explain how this request fits into North Carolina's Beneficiary Mitigation Plan.

The Eastern Band of Cherokee Indians has lands in Swain, Jackson, Graham and Cherokee counties. Each county had the following number of registered subject Volkswagens: Swain: 34, Jackson: 118, Graham: 8, and Cherokee: 36. According to recent Census data, the median income range on the Qualla Boundary (Swain and Jackson counties) is \$27,813. For the entire state of North Carolina, this income range is significantly greater, at \$50,584. Similarly, the poverty rate on the Qualla Boundary is 27%, far greater than the rest of North Carolina 16.4%. This information, along with the fact that most of the population residing on the Qualla boundary are Native American, qualifies the area of the Native Electric pilot project as an environmental justice area. The diesel school bus that EBCI is proposing to replace is a 1998 class 7 school bus and has an estimated useful life of about 9 years (based off the EPA Diesel Emissions Quantifier table). This request meets all the Mitigation Plan and RFP criteria for a school bus project. It also meets North Carolina's goal of implementing a few pilot electric school bus projects across the state. It will test the feasibility of electric buses in mountainous conditions. The Native Electric pilot project will be a great electric bus model to share with other school systems and fleets across the state and nation.

3. What is the likelihood that the project will incentivize future indirect NOx and other emission reductions? That is, will this be the beginning or continuation of a transition of the fleet to an alternative fuel or electricity? If so, please provide details.

The EBCI and CBC have always been progressive towards greener and more sustainable fleet technologies and have been influential in Cherokee for transitioning to alternative fuels. Beginning in 2012, the CBC began the on-site manufacturing of biodiesel fuel made from used cooking oil collected from community restaurants, individuals and the casino. The CBC Biodiesel Facility produces about 400 gallons of biodiesel per week and it is used in 26 school buses and 2 trucks. The biodiesel facility was a product of the partnership between the EBCI AQO and the CBC, through a grant from the EPA. Native Electric will be another partnership between the EBCI AQO and the CBC. The addition of an electric bus will increase fleet efficiency while helping to reduce NOx and other diesel emissions for the EBCI community. The EBCI currently has two light duty electric vehicles in its fleet and there are four charging stations in Cherokee. The EBCI Chief, Richie Sneed, owns an electric vehicle (Tesla) as well and is in full support of the Native Electric project. The future goal of the EBCI and the CBC is to transition to more electric buses and light duty electric vehicles, building on the vehicle charging infrastructure. This fleet transition will be a respectable model to the Cherokee Community and promote other sustainable fleet transitions within EBCI departments to help ensure a healthier environment for future generations.

4. Are there any societal co-benefits of the project? Are there any “sensitive” populations including, but not limited to asthmatics, children, or the elderly that are likely to be directly benefited by the project?

Based off the EBCI 2014 EI, the major source (93%) of NOx for EBCI lands are on-road sources. Emissions of NOx contribute to the formation of ground level ozone. Diesel emissions and ground level ozone can aggravate chronic respiratory problems like asthma, emphysema and lung cancer. The Cherokee Indian Hospital Authority (CIHA) has a total active population of 13,836 people of which 40% of the total has been diagnosed with asthma and has had at least one visit to CIHA in the last 3 years. Also, 1% has been diagnosed with emphysema and .04% with lung cancer. Most children diagnosed with asthma on EBCI lands attend the Cherokee Central School System (CCSS), which the CBC provides all bus transportation for. The health of these children will directly benefit from an electric bus.

5. Project Feasibility: Provide a description of how you as the applicant have the necessary technical, managerial, procurement, and financial capability and experience to execute on your proposed project.

EBCI has a comprehensive financial management system that provides accurate, current, and complete disclosure of results regarding the use of funds under grants and contracts. It also provides adequate source documentation for Federal and non-Federal funds used under grants and contracts. The Tribal's financial management system maintains effective internal control and fund accountability procedures and allows separation of functions so that the person who makes obligations for the grantee is not the same person who signs the checks to disburse the funds for those obligations. The EBCI has a Grants Compliance Office who is responsible for monitoring grants and contracts for compliance as specified in each grant and contract agreement.

6. Use this space for any additional information that you believe will be helpful in evaluating the project. (Optional)

EBCI strives to educate tribal members about air quality and actions to reduce its impact. EBCI AQO are active members of the Regional Clean Air Campaign and Land of Sky Clean Vehicles Coalition and collaborate with the Great Smoky Mountains National Park air quality and education staff to share information and educate park and tribal land visitors. Another benefit of this project is the reduction of fine particulates from diesel exhaust. Fine particles scatter sunlight and create haze that obscures mountain vistas. The reduction in fine particles will help improve visibility and in turn help the tourism industry and increase visitor experience. Duke Energy's EV program has offered to provide funding later if their Electric Transportation pilot program is approved.

Certification

The undersigned is an official authorized to represent the applicant. The person that submitted this document in the DAQ Grants Management System has the authority to legally bind the applicant or be the designated fiscal agent. The application was electronically signed in the DAQ Grants Management System when submitted by the applicant.

I certify that all proposed activities will be carried out; that all money received will be utilized solely for the purposes for which it is intended; that records documenting the planning process and implementation will be maintained and submitted when requested, and DEQ is hereby granted access to inspect project sites and/or records. It is understood that if this project is selected a contract with DEQ will be executed. I further attest that at least 70% of the equipment's operation will occur in North Carolina for the next 5 years.

Print Name of Authorized Representative	Title
	Applicant
Date	

Required and Optional Attachments

Required application attachments and the original application are available to view in the DAQ Grants Management System.

1. A completed the DAQ application vehicle worksheet.
2. Any nonprofit applicants required to obtain a Charitable Solicitation License from the North Carolina Department of the Secretary of State must provide a copy of the license.
3. An itemized budget for the project.
4. Any optional attachments such as any supporting documentation or letters of support, etc.

