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CONTACT INFORMATION

Organization Name	Caldwell - West Caldwell Public Schools
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PROJECT NAME	Propane School Bus Pilot

PROJECT CATEGORY OR CATEGORIES (choose from 1-9 in "Eligible Projects" section above)

1 ☐ 2 ☑ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐

PROJECT PRIORITY Priority # 1 of 3 proposals

If submitting more than one proposal, what is the sponsor's priority of this proposal?

PROJECT BUDGET $ 255,000.00

Provide total estimated project budget, include source and amount of cost share if applicable.

Request from VW Trust: $63,750 Cost Share from District: $191,250

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

Geographic area where emissions reductions will occur? western Essex County

Estimated size of population benefitting from the emission reductions? 120,000

Estimated useful life of the project? 12 years

Number of engines/vehicles/vessels/equipment included in the project? 3

Estimated emission benefits should be expressed in tons per year (TPY) of emission reduced for NOx and for PM 2.5 over the lifetime of the project. Identify methodology used.

Estimated NOx benefits? 0.81 TPY

Methodology Used? 537 lbs. of NOx reduced / 2000 x 3 buses

Particulate matter (PM 2.5) benefits? 0.03 TPY

Methodology Used? .1 lbs/day of PM /2000 times 200 days x 3 buses

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

Essex County is one of the communities in the state most impacted by air pollution. In western Essex County, where we are located, the level is moderate, but our buses also travel in parts of the county in which the level of air pollution is severe.

Project partners, if any? Hoover Truck and Bus Center, Flanders, NJ (Blue Bird/Roush)
Explain how the project will provide cost effective and technically feasible emission reductions. Cost effectiveness should be expressed in dollars per ton per year of emissions reduced for NOx and for PM 2.5. Propane buses are very cost-effective at reducing NOx and PM. At an estimated reduction of 537 lbs, Roush/CleanTech has determined that the cost per pound reduced would be $177.
Estimated timeframe for implementation? Include a project timeline that identifies start and end dates, as well as the timeframe for key milestones. May 2018: Order buses August 2018: Set up installation of propane tanks through Amerigas October 2018: Install propane tanks January 2019: Receive buses, Run inspections, Integrate buses into scheduled runs
Demonstrated success in implementing similar projects? We have implemented several energy-saving projects in our district, most recently including installation of higher efficiency HVAC equipment (2014), higher quality windows and doors (2015), and creation of sustainability learning center projects through Sustainable Jersey for Schools (2016). We are currently implementing an ESIP project through the state, which will involve over $4 million in energy improvements.
If your proposed project involves alternative fuels, provide a demonstration of current or future plans to provide adequate refueling infrastructure. Through Hoover/Roush/CleanTech, we have determined that Amerigas will be able to install a propane tank on our property as part of a three-year supply agreement.
Has your organization been approved to receive and expend any other grant funds related to this project? If so, please provide details. No, but if still available, we will apply to Amerigas for a propane bus rebate of $5,000.
Please provide any additional information that supports this project. We have three school buses, purchased in October 2004 and September 2005, which we are preparing to de-commission. We would like to replace these buses with propane buses, which significantly reduce emissions and also have lower maintenance costs.

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