BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary <u>State of Arkansas</u>

Lead Agency Authorized to Act on Behalf of the Beneficiary <u>Arkansas Department of Energy and</u> Environment Quality (E&E) Division of Environmental Quality (DEQ)

Action Title:	Class 4-8 School Bus, or Transit Bus	
Beneficiary's Project ID:	Clean Fuels Year 2	
Funding Request No.		
Request Type:	 □Reimbursement □Advance ✓ Other (specify): 	
(select one or more)	Advance funding for projects and DEQ program administration costs	
Payment to be made to: (select one or more)	 ✓ Beneficiary ✓ Other (specify): A funding request directing administrative costs is being submitted separately from the funding request directing project-related costs to the disbursement sub-account for the Clean Fuels Program established with Wilmington Trust, per the WT Mitigation Arkansas Disbursing Agreement. Project-related costs will be directed to the project sponsor using the Payee Information Upload Template in accordance with the WT Mitigation Arkansas Disbursing Agreement 	
Funding Request & Direction (Attachment A)	 ✓ Attachment A for Administrative costs and directing funding to be moved to Wilmington Trust disbursement subaccount to be Provided Separately 	

SUMMARY

 Eligible Mitigation Action
 ✓ Appendix D-2 item (specify): Item 2: Class 4-8 School Bus, or Transit

 Bus
 □
 Item 10 - DERA Option (5.2.12) (specify and attach DERA

 Proposal):
 □
 Item 10 - DERA Option (5.2.12) (specify and attach DERA

Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1): This Eligible Mitigation Action Certification (EMAC) implements the Arkansas Clean Fuels Funding Assistance Program described in section IV.E. of Arkansas's Beneficiary Mitigation Plan as revised The table below lists the proposed projects selected by DEQ for funding during the Clean Fuels program year 2. DEQ requests approval from the Trustee to replace the vehicles listed in the table below.

Applicant	Proposed Vehicle	Proposed Replacement
Pulaski County Special School	1 2000 and 1 2002 Diesel	2 LPG powered school buses
District	powered school bus	
Jacksonville North Pulaski	1 2002 Diesel powered school	1 LPG powered school bus
School	bus	
Rock Region Metropolitan	3 2008 Diesel Powered transit	3 CNG powered Transit buses
Transit Authority	buses	
Fort Smith School District	2 1993 and 1 2002 Diesel	2 LPG powered school buses
	powered school bus	

The vehicles to be replaced will be scrapped in accordance to the requirements of the Trust. All vehicles to be replaced pursuant to this Certification meet the requirements specified for Eligible Mitigation Action 2.

The replacement projects will reduce emissions of nitrogen oxides and particulate matter from each vehicle lessening potential exposure of Arkansans to harmful air pollutants including ozone, fine particulate matter, and nitrogen dioxide.

DEQ will direct reimbursement of eligible as expenses to the applicant once the projects are completed and all required documentation has been submitted to DEQ.

DEQ is requesting funding for personnel costs and fringe benefits associated with implementing the Clean Fuels Program. Administrative costs will not exceed 15% of the total cost the Clean Fuels Program.

Estimate of Anticipated NOx Reductions (5.2.3):

DEQ estimated anticipated NOx reductions from each of the selected projects using the AFLEET Heavy-Duty Vehicle Emission Calculator provided by Argonne National Laboratory <u>https://afleet-web.es.anl.gov/hdv-emissions-calculator/</u>

Proposed projects	Replacement technology	New Vehicle NOx (lb.) Emissions benefits	New Vehicle Cost NOx (lb.) cost effectiveness
Pulaski County Special School District Bus #1	Propane	1866.09	\$53
Pulaski County Special School District Bus #2	Propane	2258.44	\$44
Jacksonville North Pulaski School District Bus #1	Propane	2871.45	\$34
Jacksonville North Pulaski School District Bus #2	Propane	2871.45	\$34

Rock Region Metropolitan Transit	CNG	8463.85	\$65	
Authority Bus #1		0.4.50.0.7	.	
Rock Region Metropolitan Transit Authority Bus #2	CNG	8463.85	\$65	
Rock Region Metropolitan Transit Authority Bus #3	CNG	8463.85	\$65	
Fort Smith School District Bus #1	Propane	291.93	\$430	
Fort Smith School District Bus #2	Propane	234.63	\$535	
Fort Smith School District Bus #2	Propane	1290.54	\$97	

Identification of Governmental Entity Responsible for Reviewing and Auditing Expenditures of Eligible Mitigation Action Funds to Ensure Compliance with Applicable Law (5.2.7.1): Arkansas Department of Finance and Administration

Describe how the Beneficiary will make documentation publicly available (5.2.7.2).

DEQ will post this EMAC minus Attachments A and D, as well as project application instructions for the program described in this EMAC to <u>https://www.ADEQ.state.ar.us/air/planning/vw.aspx</u>. DEQ will upload information including estimated emissions reductions, program implementation milestones, and project recipients and awards to the same web page.

Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8).

A cost-share is required for all projects funded under the Clean Fuels program. The table below provides the funding assistance amounts and minimum cost-share for each organization and project type.

Organization Type	Project Type	Maximum Funding Assistance (Percentage of Project Cost)	Minimum Mandatory Cost Share from Project Sponsor (Percentage of Project Cost)
Government Owned	Replacement	70%	30%

DEQ retains the right to partially fund proposals.

Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9).

On February 28, 2018, DEQ provided notice to the US. Fish and Wildlife Service, U.S. National Park Service, and the U.S. Forest Service of Arkansas's designation as a Beneficiary under the Trust. These notices were sent to the email addresses listed in the Trust Agreement and included a letter from Stuart Spencer, Associate Director of the Office of Air Quality at DEQ, the Environmental Mitigation Trust Agreement for State Beneficiaries, the Notice of Beneficiary Designation, and the Amended D-3 Certification with Attachment. These federal land managers were also provided with a link to <u>https://www.ADEQ.state.ar.us/air/planning/vw.aspx</u>, where DEQ is posting information related to DEQ's implementation of Arkansas's beneficiary mitigation plan. These notifications have been posted to the web page.

If applicable, describe how the mitigation action will mitigate the impacts of NOx emissions on

communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

This mitigation action will provide the NOx emissions benefits outlined in 5.2.3. in Sebastian County and Pulaski County by the proposed projects which will benefit the public, affect a large population density, and reduces environmental risks to the public, sensitive populations, economically-disadvantaged populations, and other populations with disproportionately high and adverse health or environmental impacts. of such emissions.

The Clean Fuels Program prioritizes the funding of project in areas where communities have historically borne a disproportionate share of the adverse impacts of pollutant emissions using three metrics:

1) # of settlement subject vehicles registered in the county relative to other counties in Arkansas;

2) Onroad NOx emissions relative to other counties in Arkansas; and

3) Historic or current ozone and PM2.5 standards near to or exceeding the level of the standard.

ATTACHMENTS (CHECK BOX IF ATTACHED)

✓ Attachment A Funding Request and Direction

 ✓ Attachment B Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).

✓ Attachment C Detailed Plan for Reporting on Eligible Mitigation ActionImplementation (5.2.11).

✓Attachment D	Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding \$25,000 (5.2.6). [Attach only if project involves vendor expenditures exceeding \$25,000.]
Attachment E	DERA Option (5.2.12). [Attach only if using DERA option.]
	Attachment F Attachment specifying amount of requested funding to be debited against each beneficiary's allocation (5.2.13). [Attach only if this is a joint application involving multiple beneficiaries.]

CERTIFICATIONS

By submitting this application, the Lead Agency makes the following certifications:

- 1. This application is submitted on behalf of Beneficiary, <u>the State of Arkansas</u>, and the person executing this certification has authority to make this certification on behalf of the Lead Agency and Beneficiary, pursuant to the Certification for Beneficiary Status filed with the Court.
- 2. Beneficiary requests and directs that the Trustee make the payments described in this application and Attachment A to this Form.
- 3. This application contains all information and certifications required by Paragraph 5.2 of the Trust Agreement, and the Trustee may rely on this application, Attachment A, and related certifications in making disbursements of trust funds for the aforementioned Project ID.
- 4. Any vendors were or will be selected in accordance with a jurisdiction's public contracting law as applicable. (5.2.5)
- 5. Beneficiary will maintain and make publicly available all documentation submitted in support of this funding request and all records supporting all expenditures of eligible mitigation action funds subject to applicable laws governing the publication of confidential business information and personally identifiable information. (5.2.7.2)

DATED: <u>04/26/2021</u>

William Montgomery Associate Director, Office of Air Quality

Arkansas Department of Energy and Environment [LEAD AGENCY]

for

<u>State of Arkansas</u> [BENEFICIARY]

ATTACHMENT B

CLEAN FUELS PROJECT MANAGEMENT PLAN

PROGRAM SCHEDULE AND MILESTONES

The Clean Fuels program was designed to be a four year program to provide funding assistance on a competitive basis for projects that reduce emissions by repowering or replacing eligible diesel vehicles with diesel, alternate-fueled (low NOx compressed natural gas, propane, or liquefied natural gas), or all-electric vehicle technologies. DEQ's Clean Fuels Program year 2 received 4 proposals for eligible mitigation action item 2: Class 4-8 School Bus, or Transit Bus. DEQ proposes to replace 7 diesel powered school buses with new Liquid Propane Gas (LPG) powered School Buses and 3 diesel powered transit buses with 3 Compressed Natural Gas (CNG) powered transit buses.

Milestone	Date
DEQ and Project Manager sign Memorandum of Agreement (MOA)	July, 2021
specifying the terms of the project.	
Project Manager certifies project completion and provides required	Within 6 Months
documentation to DEQ.	of Signature of
	MOA (Est.
	January 2022
	unless more time
	is requested due
	to project
	requirements)
DEQ completes review of Project Manager documentation and certifies	Within 60 days
payment direction to disbursing agent	of complete
	documentation
	receipt
Disbursing agent remits payment to project sponsor	Within 3 days of
	direction for
	payment
DEQ Reports Program Completion and expenditures to Trustee	Semi-Annual
	Report

PROGRAM BUDGET

Cost-share requirements are specified in the Clean Fuels Program Beneficiary Eligible Mitigation Action Certification form. A total of \$704,479 has been allocated to the Clean Fuels Program year two, with an estimated \$676,479 to be awarded to program participants for completing projects and no more than \$28,000 for administrative costs associated with running the program.

Period of Performance: Fall 2021 to Winter 2022		
Budget Category	Share of Total Program Budget to be funded by the Trust	Estimated Cost-Share (Project Sponsor)
Program Participants Support	\$676,479	\$1,746,166
Administrative	\$28,000	\$0
Project Totals	\$704,479	\$1,746,166

PROJECTED TRUST ALLOCATIONS:

The table below indicates anticipated funds to be drawn down from Arkansas's allocation under the Trust for the Clean Fuels Program Year 2. Cumulative trustee payments requested to date against cumulative beneficiary allocation includes both funds received by DEQ for administrative and subrecipient costs and funds directed to subaccounts held by Wilmington Trust, NA as the disbursing agent.

Project Trust Allocations	2021
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$704,479.00
2. Anticipated Annual Cost Share	\$1,746,166.00
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$2,450,645.00
4. Cumulative Trustee Payments Requested to Date Against Cumulative Beneficiary Allocation	\$4,402,977.65
5. Current Beneficiary Project Funding to be Paid through Trust (line 1)	\$704,479.00
6. Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$5,107,456.65
7. Beneficiary Share of Estimated Trust Funds	\$14,647,909.09
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (Line 7 minus line 6)	\$9,540,452.44

ATTACHMENT C

DETAILED PLAN FOR REPORTING ON ELIGIBLE MITIGATION ACTION IMPLEMENTATION

The Arkansas Department of Energy and Environment (E&E), Division of Environmental Quality (DEQ) will provide detailed reporting on the Clean Fuels Funding Assistance Program in two ways: 1) timely updates to DEQ's Volkswagen Mitigation Trust web page and 2) semiannual reporting to Wilmington Trust.

1. DEQ Volkswagen Mitigation Trust webpage

DEQ maintains a Volkswagen Mitigation Trust web page that has been designed to disseminate information regarding Arkansas's beneficiary mitigation plan and implementation of that plan. The web page is located at <u>https://www.ADEQ.state.ar.us/air/planning/vw.aspx</u>. Guidance on how to apply for reimbursement under the CLEAN FUELS Funding Assistance Program is accessible via this web page. DEQ will post the Eligible Mitigation Action Certification (EMAC) and Attachments B and C to this web page. DEQ will also upload information to this web page including estimated emission reductions, program implementation milestones, and project recipients and awards.

2. Semiannual reporting to Wilmington Trust

The State Beneficiary Trust Agreement establishes the following requirements for reporting for each Eligible Mitigation Action to the Trustee:

For each Eligible Mitigation Action, no later than six months after receiving its first disbursement of Trust Assets, and thereafter no later than January 30 (for the preceding six-month period of July 1 to December 31) and July 30 (for the preceding six-month period of January 1 to June 30) of each year, each Beneficiary shall submit to the Trustee a semiannual report describing the progress implementing each Eligible Mitigation Action during the six-month period leading up to the reporting date (including a summary of all costs expended on the Eligible Mitigation Action through the reporting date). Such reports shall include a complete description of the status (including actual or projected termination date), development, implementation, and any modification of each approved Eligible Mitigation Action. Beneficiaries may group multiple Eligible Mitigation Actions and multiple sub-beneficiaries into a single report. These reports shall be signed by an official with the authority to submit the report for the Beneficiary and must contain an attestation that the information is true and correct, and that the submission is made under penalty of perjury. To the extent a Beneficiary avails itself of the DERA Option described in Appendix D-2, that Beneficiary may submit its DERA Quarterly Programmatic Reports in satisfaction of its obligations under this Paragraph as to those Eligible Mitigation Actions funded through the DERA Option. The Trustee shall post each semiannual report on the State Trust's public-facing website upon receipt.

DEQ has developed a report template for documenting implementation of the CLEAN FUELS Funding Assistance Program. This template includes information for each budget category, including:

- Mitigation Funds Expended for the Current Reporting Period
- Voluntary Additional Cost-Share Expended for the Current Reporting Period
- Cumulative Mitigation Funds Expended
- Cumulative Voluntary Additional Cost-Share Expended

In addition, the template asks the following questions that will be answered for each reporting period:

- What actual accomplishments occurred during the reporting period?
- Were funds awarded for any projects under the Eligible Mitigation Action Plan during the current reporting period? If so, list the recipients and how much funding they received.
- Provide a comparison of actual accomplishments with the anticipated outputs/outcomes and timelines/milestones specified in the Eligible Mitigation Action Management Plan.
- If anticipated outputs/outcomes and/or timelines/milestones are not met, why not? Did you encounter any problems during the reporting period which may interfere with meeting the project objectives?
- How do you propose to remedy any problems? Identify how and the date you will get back on course to meet the anticipated outputs/outcomes and/or timelines/milestones specified in the Eligible Mitigation Action Management Plan.
- If any cost-shares are reported for this Reporting Period in Table 1 above, identify the source of the funds.
- Did any public relations events regarding this program take place during the reporting period?
- What is the URL for the state website where members of the public can find information about implementation of this Eligible Mitigation Action?

The template will also include a section for inputting project-specific details including the following:

- Type of Project: Repower or Replacement
- Fleet Owner
- Primary Place of Performance
 - o State,
 - o County,
 - o City,
 - ZIP Code
- Eligible Vehicle/Equipment Information
 - Vehicle Size Class
 - Vehicle Type
 - Vehicle Identification Number
 - Vehicle Make
 - Vehicle Model
 - o Vehicle Model Year

- o Engine Serial Number
- Engine Model Year
- o Engine Horsepower
- o Engine Fuel Type
- Annual Amount of Fuel Used
- Annual Miles Traveled
- Annual Idling Hours
- Remaining Life of Engine
- New Vehicle/Equipment Information
 - o Fleet Owner
 - o Primary Place of Performance
 - State,
 - County,
 - City,
 - ZIP Code
 - o Vehicle Size Class
 - o Vehicle Type
 - o Vehicle Identification Number
 - Vehicle Make
 - o Vehicle Model
 - o Vehicle Model Year
 - Engine Serial Number
 - o Engine Model Year
 - Engine Horsepower
 - Engine Fuel Type

Attachment D

Table of Contents

Fable of Contents	1
Arkansas Clean Fuels Program	2
(Submission #: HP5-XBPY-PD9KY, version 1)	2
Details	2
Form Input	2
Organization	2
Project Details (1 of 3)	3
School Bus 1993; Replace	3
Project Details (2 of 3)	5
School Bus 1993; Replace	5
Project Details (3 of 3)	6
School Bus 2002; Replace	6
Project Overview	7
Project Milestones	8
Project Benefits	8
Attachments	8
Internal Data	8

Arkansas Clean Fuels Program

version 1.7

(Submission #: HP5-XBPY-PD9KY, version 1)

Details

Form Alias	Arkansas Clean Fuels Program
Form Started	1/20/2021 10:09 AM by Dennis Siebenmorgen
Form Submitted	1/28/2021 12:46 PM by Dennis Siebenmorgen
Submission #	HP5-XBPY-PD9KY
Status	Submitted
Applicant	Fort Smith School District

Form Input

Organization

Organization

Please provide the following information about the organization.

Organization Name Fort Smith School District

Mailing Address - Line 1 3205 Jenny Lind Rd

Mailing Address - Line 2 NONE PROVIDED

City Fort Smith

State Arkansas

Zip Code 72901

County Sebastian

Type of Organization Public school district

Describe the organization's size and type of work usually performed.

The Fort Smith Public Schools is a Pre-K - 12th grade school district in both Fort Smith and Barling, Arkansas. There are 26 schools within the district, which collectively serves 14,614 students. The Fort Smith Public Schools operate a fleet of 87 buses. Eighteen, of which, are wheelchair accessible buses. The FSPS Transportation Department services the entire district providing 54 routes buses (5 pre-school, S class size, 18 curbside/specialty, and 26 regular). The department is responsible for the transportation of approximately 4100 eligible students. The department also transports students to over 2,500 activity trips on a regular school year. We have approximately 105 total drivers. There are four office employees, two mechanics, and two technicians/trainers to help keep the operation running smoothly. All drivers attend yearly safety-training sessions. Each driver also participates in physical exams and random drug testing as required by the State of Arkansas.

Congressional District

If you do not know your congressional district, click on the Congressional Districts Map below. Then, type your address into the

search bar and click Find District. Your congressional district will appear at the top of the page. <u>Congressional Districts Map</u>

Congressional District

Arkansas's 3rd Congressional District

Project Manager

Please provide the following information about the project manager.

Project Manager Contact Information

Contact		
First Name	Last Name	
Dennis	Siebenmorge	n
Title		
Director		
Phone Type	Number	Extension
Business	4797852501	
Email dsiebenm@fort	smithschools.org	9
Fax		
479-709-6061		
Address		

Signature Document

Please download the signature form, complete and sign the form, and then upload it below. Download Signature Form Here

Signature

signature form.pdf - 01/20/2021 11:15 AM Comment NONE PROVIDED

Programmatic Capability: Describe any past performance in successfully completing and managing projects similar in size, scope and relevance to the proposed project.

We were fortunate to receive the Go Red Grant in 2020. Our district is fortunate to have a purchasing agent who conducted all of the bidding requirements for the grant. I, along with assistance from Ms. Mcknight, completed all the quarterly and final reports. We used a local scrap metal facility who assisted in destroying the three buses. We completed the Go Red Grant requirements and received our grant funds.

Describe other environmentally friendly measures the organization already practices.

•When bus drivers arrive to drop off or pick up passengers, they don't idle their buses unnecessarily for more than 15 minutes. •The district practices safe handling of hazardous waste. We collect all our harmful liquid/fluids and oil/grease into a designated holding tank, which then gets picked up by a company who safely takes it to be recycled. •All cafeterias cooking oil and food waste gets picked up. •Many of our schools promote recycling efforts at their individual schools. •We have the Sebastian County Solid Waste grant that provides all 4th grade students an educational tour of the landfill. •Fort Smith Sanitation has recycling dumpsters on each campus. •Continue to research environmental safe fuels. •Transportation Department assesses and documents each bus in the fleet for age and condition to determine which buses need to be replaced first

Project Details (1 of 3)

School Bus 1993; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type School Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

The new buses will be used every day on our regular routes and extra-curricular trips one hundred percent (100%) of the time in Arkansas. The average yearly route mileage will be around 5,100 miles and approximately 1,000 miles for extra-curricular activity miles.

Select the percentage of time the affected equipment will be operated in Arkansas.

100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type

Replace

Replace Type Replace with LPG

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 1993

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced.

3740

Estimated Invoice Cost of New Equipment (\$)

125000

Estimated Delivery and/or Transportation Costs of the New Equipment (\$)

0

Estimated Installation Costs, if applicable (\$)

1125

Estimated Scrappage and Disposal Costs (\$)

Other Costs Related Directly to the Project (\$)

0

Explain the other costs.

If we use the state contract, we will not have the advertising expenses. The Installation cost listed will be the two way radios we have installed on every bus. This is our departments only form of communication between the office and each bus. Last year the cost of installation, antenna, wiring, and radio was approximately \$1125.

Sales Tax (\$)

0

Scrap Value (\$) 600

Estimated Total Cost Per Vehicle (\$) 125525

Project Details (2 of 3)

School Bus 1993; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type

School Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

The new buses will be used every day on our regular routes and extra-curricular trips one hundred percent (100%) of the time in Arkansas. The average yearly route mileage will be around 4800 miles and approximately 1,000 miles for extra-curricular activity miles.

Select the percentage of time the affected equipment will be operated in Arkansas. 100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type

Replace

Replace Type

Replace with LPG

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 1993

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 4800

Estimated Invoice Cost of New Equipment (\$) 125000

Estimated Delivery and/or Transportation Costs of the New Equipment (\$)

0

Estimated Installation Costs, if applicable (\$) 1125

Estimated Scrappage and Disposal Costs (\$)

Other Costs Related Directly to the Project (\$)

0

Explain the other costs.

If we use the state contract, we will not have the advertising expenses. The Installation cost listed will be the two way radios we have installed on every bus. This is our departments only form of communication between the office and each bus. Last year the cost of installation, antenna, wiring, and radio was approximately \$1125.

Sales Tax (\$)

0

Scrap Value (\$) 600

Estimated Total Cost Per Vehicle (\$) 125525

Project Details (3 of 3)

School Bus 2002; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type

School Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

The new buses will be used every day on our regular routes and extra-curricular trips one hundred percent (100%) of the time in Arkansas. The average yearly route mileage will be around 4800 miles and approximately 1,000 miles for extra-curricular activity miles.

Select the percentage of time the affected equipment will be operated in Arkansas.

100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type Replace

Replace Type Replace with LPG

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2002

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 8000

Estimated Invoice Cost of New Equipment (\$) 125000

Estimated Delivery and/or Transportation Costs of the New Equipment (\$)

0

Estimated Installation Costs, if applicable (\$) 1125

Estimated Scrappage and Disposal Costs (\$) 0

Other Costs Related Directly to the Project (\$)

Explain the other costs.

If we use the state contract, we will not have the advertising expenses. The Installation cost listed will be the two way radios we have installed on every bus. This is our departments only form of communication between the office and each bus. Last year the cost of installation, antenna, wiring, and radio was approximately \$1125.

Sales Tax (\$)

0

Scrap Value (\$) 600

Estimated Total Cost Per Vehicle (\$) 125525

Project Overview

Project Physical Location

Please provide the street address and county of the project.

Project Address

3205 JENNY LIND RD FORT SMITH, AR 72901

County

Sebastian

Infrastructure Availability

amerigas.docx - 01/20/2021 03:38 PM Comment NONE PROVIDED

Total Number of Vehicles

Total Project Cost (\$) 376575

Maximum Funding Amount That Can Be Requested from DEQ (\$) 263602.5

Funding Amount Requested from DEQ (\$) 200000

My Cost Share (\$) 176575

Project Milestones

Project Step	Estimated Date (MM/DD/YY)
Solicit bids in newspaper of statewide circulation	3/26/2021
Bid(s) awarded	4/9/2021
Vehicle replaced/repowered	9/24/2021
Old equipment scrapped	9/28/2021
Final report to DEQ	10/15/2021

Describe your approach to achieving project milestones.

Since we have completed a similar project with the Go Red Grant, we feel the milestones are achievable. If we use the state procurement regulations, we could speed up the process by not having to advertise. Bus companies recommend 180 day delivery of a new bus. We will not be able to scrap the old buses until the new buses are delivered and insured. The sooner we are notified as selected and a signed MOA is obtained, the sooner we can proceed with the ordering of the buses.

Project Benefits

Describe the public benefit of this project.

Toxic diesel exhausts from idling "older" school buses can accumulate on and around the bus and pose a health risk particularly to children. When buses idle close to the schools, the exhaust fumes can also pollute the air inside the school building and pose a health risk to students as young as four years old throughout the day. Exposure to diesel exhaust can cause lung damage and respiratory problems. Emissions from old diesel exhaust also intensify asthma and existing allergies, and long-term exposure is thought to increase the risk of lung cancer. This older generation of buses are still being used and still emitting particulate matter, nitrogen oxides, and greenhouse gases around our children and into the atmosphere. Once we change to better emission-compliant buses, those with homes and businesses along our bus routes will breathe cleaner air.

Describe how this project will reduce environmental risks to economically-disadvantaged and other populations with disproportionately high and adverse human health or environmental impacts.

Populations on the lower end of the socio-economic spectrum and minorities are disproportionately exposed to traffic and air pollution and at higher risk for adverse health outcomes. The relationship between SES, air pollution and health effects is complex and confounded by other stressors. Economically disadvantaged groups tend to be exposed to more family turmoil, violence, instability, crowding, and noise. Neighborhoods with high levels of poverty tend to have higher crime rates, more substandard housing and offer poorer schools and municipal services. The new buses will be used on routes serving the lower socio-economic population of Fort Smith.

Describe how this project will reduce environmental risks to the public and sensitive populations.

Air pollution from diesel vehicles has health implications for everyone, but children may be more susceptible to this pollution because they breathe 50 percent more air per pound of body weight than do adults. Pollutants from emissions can cause serious health concerns, especially for children, the elderly, and people with respiratory problems. Nationally, these emissions are linked to thousands of premature deaths, hundreds of thousands of asthma attacks, millions of lost work days, and numerous other health impacts every year. One of the buses selected replacement is a curbside bus. This bus has the most sensitive students in our district.

Describe how the project will contribute to the widespread adoption of alternative fuels and advance the establishment of alternative fuel corridors.

If awarded the grant, Fort Smith School District would be one of the first districts in the state to operate buses using alternative fuels. While alternative fuels is common in other parts of the country, Arkansas has not adopted the ideal of operating school buses on alternative fuels. If awarded and implemented, our district would be willing to continue the adoption of alternative fuels. Our district currently has approximately 50 pickups operating on gasoline. If we are successful, I could see our district operating more vehicles on alternative fuel. After visiting with Amerigas, we feel the alternative fuel adoption would save the district thousands of dollars per year along with helping to clean the environment of toxic diesel fumes.

Attachments

Date	Attachment Name	Context	User
1/20/2021 3:38 PM	amerigas.docx	Attachment	Dennis Siebenmorgen
1/20/2021 11:15 AM	signature form.pdf	Attachment	Dennis Siebenmorgen

Internal Data

Label	Value
Completeness Check	
Application Complete	
Application Scored	
Application Score	
Application Recommended for Funding	
MOA Excecuted	
Reimbursement Packet Received	
Payment Sent	

Table of Contents

Table of Contents	1
Arkansas Clean Fuels Program	2
(Submission #: HP6-57P8-TEFMN, version 1)	2
Details	2
Form Input	2
Organization	2
Project Details (1 of 2)	3
School Bus 2002; Replace	3
Project Details (2 of 2)	4
School Bus 2002; Replace	4
Project Overview	6
Project Milestones	6
Project Benefits	7
Attachments	7

Arkansas Clean Fuels Program

version 1.7

(Submission #: HP6-57P8-TEFMN, version 1)

Details

Form Alias	Arkansas Clean Fuels Program
Form Started	1/30/2021 10:39 AM by Phillip Lloyd
Form Submitted	1/31/2021 1:42 PM by Phillip Lloyd
Submission #	HP6-57P8-TEFMN
Status	Submitted
Applicant	Jacksonville North Pulaski School District

Form Input

Organization

Organization

Please provide the following information about the organization.

Organization Name Jacksonville North Pulaski School District

Mailing Address - Line 1 2310 N Redmond Rd

Mailing Address - Line 2 NONE PROVIDED

City Jacksonville

State Arkansas

Zip Code 72076

County Pulaski

Type of Organization Public school district

Describe the organization's size and type of work usually performed.

JNPSD transports 3000 students 178 days a year. We have 145 trips using 40 buses; 6 of them are spares used when any bus goes down. We also use buses to transport students to various school-approved field trips. We have 3 mechanics on duty all year to service and maintain our fleet of buses and district cars.

Congressional District

If you do not know your congressional district, click on the Congressional Districts Map below. Then, type your address into the search bar and click Find District. Your congressional district will appear at the top of the page. <u>Congressional Districts Map</u>

Congressional District Arkansas's 2nd Congressional District

Project Manager

Please provide the following information about the project manager.

Project Manager Contact Information

Contact **First Name** Last Name Barry Hickingbotham Title Director of Transportation Phone Type Number Extension 501-241-2163 **Business** Email BHickingbotham@jnpsd.org Fax 501-241-2162 Address

Signature Document

Please download the signature form, complete and sign the form, and then upload it below. **Download Signature Form Here**

Signature

Clean Fuels ePortal Certification SIGNED 2.pdf - 01/31/2021 01:11 PM Comment NONE PROVIDED

Programmatic Capability: Describe any past performance in successfully completing and managing projects similar in size, scope and relevance to the proposed project.

On a daily basis, we are adding and editing up 5 to 8 scholars every day to our 188 routes. Our mechanics service and maintain 40 buses, 22 district-owned cars, trucks, and vans. We log the mileage of every vehicle used in our fleet. In addition to our daily routes, we provide transportation for an average of 300 field trips per school year. These trips go all over Pulaski County and the state of Arkansas. With this in mind, we believe we can effectively manage a program of this size.

Describe other environmentally friendly measures the organization already practices.

We have a policy in place where our buses will not idle for longer than 10 minutes per route. This ensures that we use less fuel and exhaust fumes are kept to a minimum. We also are using Hydrotex HyFilm LEO EPD 5W-30 which exceeds the VW 504.00/507.00 specification and provides outstanding durability, cleanliness, wear protection, exhaust after-treatment, and system compatibility. Using HyFilm LEO EPD 5W-30 offers light-duty diesel engines low SAPS1 for compatibility with diesel exhaust treatment systems, improved fuel economy, and extended drain intervals. Volkswagen (VW) 504.00/507.00 lubricants are considered the most technically advanced and highest performing engine oils in the world today.

Project Details (1 of 2)

School Bus 2002; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type

School Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

The bus would be used every school day to transport students from and to their homes and to and from one of our 7 schools located in Pulaski County, and as needed for field trips, all within the State of Arkansas.

Select the percentage of time the affected equipment will be operated in Arkansas.

100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type Replace

Replace Type Replace with LPG

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2002

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 17800

Estimated Invoice Cost of New Equipment (\$) 98500

Estimated Delivery and/or Transportation Costs of the New Equipment (\$) 0

Estimated Installation Costs, if applicable (\$)

Estimated Scrappage and Disposal Costs (\$)

0

Other Costs Related Directly to the Project (\$)

Explain the other costs. NA

```
Sales Tax ($)
```

Scrap Value (\$)

0

Estimated Total Cost Per Vehicle (\$) 98500

Project Details (2 of 2)

School Bus 2002; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type

School Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

The bus would be used every school day to transport students from and to their homes and to and from one of our 7 schools located in Pulaski County, and as needed for field trips, all within the State of Arkansas.

Select the percentage of time the affected equipment will be operated in Arkansas.

100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type

Replace

Replace Type

Replace with LPG

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2002

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 17800

Estimated Invoice Cost of New Equipment (\$) 98500

Estimated Delivery and/or Transportation Costs of the New Equipment (\$)

Estimated Installation Costs, if applicable (\$)

```
0
```

Estimated Scrappage and Disposal Costs (\$)

```
0
```

Other Costs Related Directly to the Project (\$)

0

Explain the other costs. NA

Sales Tax (\$) 0

Scrap Value (\$)

•

Estimated Total Cost Per Vehicle (\$) 98500

Project Overview

Project Physical Location

Please provide the street address and county of the project.

Project Address

2310 N REDMOND RD JACKSONVILLE, AR 72076

County Pulaski

Infrastructure Availability

AmeriGas LPG Proposal.pdf - 01/31/2021 01:39 PM Comment NONE PROVIDED

Total Number of Vehicles

Total Project Cost (\$) 98500

Maximum Funding Amount That Can Be Requested from DEQ (\$) 68950

Funding Amount Requested from DEQ (\$)

137900

CORRECTION REQUEST (CREATED) Funding amount requested from DEQ incorrect

The funding amount requested from DEQ can not be more than the Maximum allowed to be requested. It can only be 70% of the total project cost. This needs to be corrected before we can move forward with application processing. Created on 2/1/2021 10:09 AM by **Deiona McKnight**

My Cost Share (\$) 59100

CORRECTION REQUEST (CREATED) My Cost share in correct

My Cost share section should equal 30% of the total project cost. Created on 2/1/2021 10:10 AM by **Deiona McKnight**

Project Milestones

Project Step	Estimated Date (MM/DD/YY)
Solicit bids in newspaper of statewide circulation	8/2/2021
Bid(s) awarded	10/4/2021
Vehicle replaced/repowered	10/29/2021
Old equipment scrapped	11/1/2021
Final report to DEQ	1/3/2022

Describe your approach to achieving project milestones.

We plan to have all the dates of the milestones in our transportation calendar with a 15-day reminder and a 5-day reminder before the posted deadline. Mr. Hickingbotham will manage all aspects of this plan. All transportation employees involved will receive email notification of any deadlines to the milestones. We have received approval from our assistant superintendent to make an application for this program. Once the bid process is published, the bid will be awarded in 30 days. Upon awarding the bid, the bus will be ordered. At the end of the school year, our mechanics drill holes in the block and head of the replaced bus. The bus frame will be cut, and photographs will be taken for proof. The bus will then be towed away by the scrapyard at no charge.

Project Benefits

Describe the public benefit of this project.

School buses fueled by propane autogas provide a reliable, clean, and affordable alternative to diesel In a growing number of school bus fleets across the nation. School systems are choosing school buses fueled by propane autogas to reduce or eliminate diesel exhaust to better comply with Environmental Protection Agency (EPA) regulations issued in 2004 and 2010 that require significant reductions in hydrocarbon, nitrogen oxide, and particulate matter emissions from heavy-duty diesel engines. Also, the 1990 Clean Air Act designated Propane as an approved Alternative Fuel. Lower operating costs decreased emissions and the longest range of alternative fuel. The EPA also regulates PM, which can create serious lung and bronchial health problems. PM is the soot you see from vehicle exhaust, which is known to aggravate asthma and is identified as a carcinogen by the World Health Organization. With both propane and modern diesel school buses, students aren't exposed to that soot because both fuels virtually eliminate it. The major difference is that unlike modern diesel, propane eliminates it without adding maintenance burdens and extra costs to the end-user.

Describe how this project will reduce environmental risks to economically-disadvantaged and other populations with disproportionately high and adverse human health or environmental impacts.

According to the U.S. Environmental Protection Agency (EPA), greenhouse gases, which include carbon dioxide, methane, nitrous oxide, and fluorinated gases, are gases that trap heat in the atmosphere. While each contributes to climate change, emissions like nitrogen oxides (NOx), carbon monoxide and particulate matter (PM) also pose a great risk to human health and air quality. One of the greatest ways to reduce these harmful emissions is to transition school bus fleets to cleaner, safer fuel sources. NOx are highly reactive gases that are regulated by the U.S. federal government due to their harm to health and the environment. They trigger long-term health problems, such as asthma, bronchitis and other respiratory issues, especially in the developing lungs of children. Over the years, the EPA has set tougher emissions standards on NOx to limit its exposure. The primary source of NOx is motor vehicles. According to a University of California Riverside study, diesel-fueled medium- and heavy-duty vehicles, including school buses, are the No. 1 source of NOx emissions in almost every single metropolitan region in the U.S. Recent research proves propane school buses, which are substantially lower in NOx than conventional fuels, are safer for the children riding in them and the communities in which they drive. According to a West Virginia University study released in 2020, propane school buses reduce NOx by at least 95% compared with clean diesel. By reducing this toxic chemical, students may perform better inside the classroom.

Describe how this project will reduce environmental risks to the public and sensitive populations.

With propane autogas buses, students aren't exposed to the emissions from older diesel buses that can aggravate asthma and cause other health issues. The EPA also regulates PM, which can create serious lung and bronchial health problems. PM is the soot you see from vehicle exhaust, which is known to aggravate asthma and is identified as a carcinogen by the World Health Organization. With both propane and modern diesel school buses, students aren't exposed to that soot because both fuels virtually eliminate it. The major difference is that unlike modern diesel, propane eliminates it without adding maintenance burdens and extra costs to the end-user. A recent Georgia State University study found diesel school bus fumes drove down test scores. The study correlated increased academic performance when children were exposed to lower levels of school bus emissions.

Describe how the project will contribute to the widespread adoption of alternative fuels and advance the establishment of alternative fuel corridors.

We plan to be one of the first school districts in Pulaski County to use propane, with plans to replace our entire fleet of 50 school buses to propane. With a filling station on our lot, we would be able to allow any school district that is or will be using propane to have a location to refuel their bus in northeast Pulaski County. We also hope to show other districts in Arkansas the benefits of changing to propane.

Attachments

Date	Attachment Name	Context	User
1/31/2021 1:39 PM	AmeriGas LPG Proposal.pdf	Attachment	Phillip Lloyd
1/31/2021 1:11 PM	Clean Fuels ePortal Certification SIGNED 2.pdf	Attachment	Phillip Lloyd

Table of Contents

Table of Contents	1
Arkansas Clean Fuels Program	2
(Submission #: HP6-95YS-JPA7Z, version 1)	2
Details	2
Form Input	2
Organization	2
Project Details (1 of 2)	3
School Bus 2000; Replace	3
Project Details (2 of 2)	4
School Bus 2002; Replace	4
Project Overview	6
Project Milestones	6
Project Benefits	6
Attachments	7

Arkansas Clean Fuels Program

version 1.7

(Submission #: HP6-95YS-JPA7Z, version 1)

Details

Form Alias	Arkansas Clean Fuels Program	
Form Started	2/4/2021 11:09 AM by Charles W Blake	
Form Submitted	2/4/2021 12:52 PM by Charles W Blake	
Submission #	HP6-95YS-JPA7Z	
Status	Submitted	
Applicant	PULASKI CO SPECIAL SCHOOL DIST	

Form Input

Organization

Organization

Please provide the following information about the organization.

Organization Name PULASKI CO SPECIAL SCHOOL DIST

Mailing Address - Line 1 3924 NEELY RD

Mailing Address - Line 2 NONE PROVIDED

City LITTLE ROCK

State Arkansas

Zip Code 72206

County Pulaski

Type of Organization Public school district

Describe the organization's size and type of work usually performed.

The Pulaski County Special School District is a public school district with approximately 12,000 students. The District covers 644 square miles, has 25 schools, operates its school bus transportation department with a fleet of 201 buses.

Congressional District

If you do not know your congressional district, click on the Congressional Districts Map below. Then, type your address into the search bar and click Find District. Your congressional district will appear at the top of the page. <u>Congressional Districts Map</u>

Congressional District

Arkansas's 2nd Congressional District

Project Manager

Please provide the following information about the project manager.

Project Manager Contact Information

<u>Contact</u>		
First Name Charles	Last Name Blake	
Title Director of Transpor	rtation	
Phone Type	Number	Extension
Business	5016070802	
Email cblake@pcssd.org		
Fax NONE PROVIDED		
Address		
Signature Document		

Please download the signature form, complete and sign the form, and then upload it below. Download Signature Form Here

Signature

20210204115052535.pdf - 02/04/2021 11:59 AM Comment NONE PROVIDED

Programmatic Capability: Describe any past performance in successfully completing and managing projects similar in size, scope and relevance to the proposed project.

The Pulaski County Special School District currently operates 201 school buses 199 diesel-fueled and 2 LPG: Propane. We transport 70% of the students enrolled and 30,000 plus students per year on the field and athletic trips. We perform the daily maintenance and fueling services for all buses.

Describe other environmentally friendly measures the organization already practices.

All of our fueling sites are inspected each year by ADEQ regulated storage tank division and each one is in good standing. The District operates under an energy management system that sets back climate control points during no operation as well as lighting controls in newer schools. Three new school campuses are LEED buildings. All campuses are smoke-free. 22 of the 25 school campuses participate in paper and plastic recycling programs as well as the recycling of cooking oils from the cafeterias. The school bus maintenance shops recycle bus oil and oil filters, as well as, recycling scrap metals in the bus shop.

Project Details (1 of 2)

School Bus 2000; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type

School Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

Transports students to and from school on bus routes, on-field, and athletic trips. The buses will operate 178 school days per year with routes running Monday-Friday from 5:30 AM-5: 30 PM. The bus fleet covers 644 square miles per day in Pulaski County and all parts of the state for field and athletic trips.

Select the percentage of time the affected equipment will be operated in Arkansas.

100%

Acronyms CNG: Compressed Natural Gas LPG: Propane Project Type Replace

Replace Type Replace with LPG

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2000

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 14000

Estimated Invoice Cost of New Equipment (\$) 98985

30303

Estimated Delivery and/or Transportation Costs of the New Equipment (\$)

0

Estimated Installation Costs, if applicable (\$)

Estimated Scrappage and Disposal Costs (\$) 2000

Other Costs Related Directly to the Project (\$)

Explain the other costs. No other cost

Sales Tax (\$) 0

Scrap Value (\$) 1500

Estimated Total Cost Per Vehicle (\$) 99485

Project Details (2 of 2)

School Bus 2002; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type School Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

Transports students to and from school on bus routes, on-field, and athletic trips. The buses will operate 178 school days per year with routes running Monday-Friday from 5:30 AM-5: 30 PM. The bus fleet covers 644 square miles per day in Pulaski County and all parts of the state for field and athletic trips.

Select the percentage of time the affected equipment will be operated in Arkansas.

100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type Replace

Replace Type Replace with LPG

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2002

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced.

14000

Estimated Invoice Cost of New Equipment (\$) 98985

Estimated Delivery and/or Transportation Costs of the New Equipment (\$)

0

Estimated Installation Costs, if applicable (\$)

0

Estimated Scrappage and Disposal Costs (\$) 2000

Other Costs Related Directly to the Project (\$)

0

Explain the other costs. No other cost

Sales Tax (\$) 0

Scrap Value (\$) 2000

Estimated Total Cost Per Vehicle (\$) 98985

Project Overview

Project Physical Location

Please provide the street address and county of the project.

Project Address

3924 NEELY RD LITTLE ROCK, ARKANSAS 72206

County

Pulaski

Infrastructure Availability

List of Fueling Sites in Little Rock.docx - 02/04/2021 11:53 AM Comment NONE PROVIDED

Total Number of Vehicles

2

Total Project Cost (\$) 198470

Maximum Funding Amount That Can Be Requested from DEQ (\$) 138929

Funding Amount Requested from DEQ (\$) 138579

My Cost Share (\$) 59891

Project Milestones

Project Step	Estimated Date (MM/DD/YY)
Solicit bids in newspaper of statewide circulation	3/8/2021
Bid(s) awarded	4/9/2021
Vehicle replaced/repowered	5/10/2021
Old equipment scrapped	5/12/2021
Final report to DEQ	6/14/2021

Describe your approach to achieving project milestones.

When project approval is granted the bids for two propane school buses will be solicited through the Arkansas Democrat-Gazette newspaper. The bids with all state-required bus specifications will be submitted to the purchasing department of Pulaski County Special School District. The bids will be opened on April 9, 2021, with all bidders invited to attend the bid openings. The bus specifications and bid details will be reviewed and awarded to the low-cost bidder. Bids will request a 60 day delivery of equipment and old equipment will be scrapped on the day of delivery. The final ADEQ report will be submitted within 30 days of project completion.

Project Benefits

Describe the public benefit of this project.

Savings Propane currently costs about half as much as diesel, which adds up to significant savings that districts can use for teachers, resources of educational tools. Lower cost of ownership over time, the district learns that it's cheaper to maintain propane-powered school buses. Propane buses are also notable for what they don't produce: a black cloud of diesel smoke at every bus stop. On-site fueling, superior winter performance.

Describe how this project will reduce environmental risks to economically-disadvantaged and other populations with disproportionately high and adverse human health or environmental impacts.

Better for Students: Diesel exhaust produces particulate matter that aggravates asthma and other conditions. With propane, there's no smell or particulate matter. Propane buses are much quieter, enabling students to converse and drivers t hear what's happening inside and outside the bus. Buses will be placed on routes in economically disadvantaged neighborhoods.

Describe how this project will reduce environmental risks to the public and sensitive populations.

Switching to environmentally friendly propane buses eliminates an estimated 80% of the smog-producing hydrocarbon generated by diesel engines.

Describe how the project will contribute to the widespread adoption of alternative fuels and advance the establishment of alternative fuel corridors.

The district will allow local media to do articles and ride alongs on new buses as well as posted the new fleet additions on its website. We push the storyline of saving the taxpayers money and improving air quality and making other districts aware that this option exists

Attachments

Date	Attachment Name	Context	User
2/4/2021 11:59 AM	20210204115052535.pdf	Attachment	Charles Blake
2/4/2021 11:53 AM	List of Fueling Sites in Little Rock.docx	Attachment	Charles Blake

Table of Contents

Table of Contents	1
Arkansas Clean Fuels Program	2
(Submission #: HP6-TDCE-2GDW8, version 1)	2
Details	2
Form Input	2
Organization	2
Project Details (1 of 3)	3
Transit Bus 2008; Replace	3
Project Details (2 of 3)	5
Transit Bus 2008; Replace	5
Project Details (3 of 3)	6
Transit Bus 2008; Replace	6
Project Overview	7
Project Milestones	7
Project Benefits	8
Attachments	9

Arkansas Clean Fuels Program

version 1.7

(Submission #: HP6-TDCE-2GDW8, version 1)

Details

Form Alias	Arkansas Clean Fuels Program
Form Started	2/26/2021 9:28 AM by Jon Wisniewski
Form Submitted	2/26/2021 4:22 PM by Jon Wisniewski
Submission #	HP6-TDCE-2GDW8
Status	Submitted
Applicant	Rock Region Metropolitan Transit Authority

Form Input

Organization

Organization

Please provide the following information about the organization.

Organization Name Rock Region Metropolitan Transit Authority

Mailing Address - Line 1 901 Maple St.

Mailing Address - Line 2 NONE PROVIDED

City North Little Rock

State Arkansas

Zip Code 72114

County Pulaski

Type of Organization Other government agency

Describe the organization's size and type of work usually performed.

Rock Region METRO (METRO) employs approximately 200 employees. METRO is the largest public transportation provider in Arkansas, serving the cities of Little Rock, North Little Rock, and Pulaski County. METRO has a fleet of 59 transit buses, 24 paratransit vans, and 5 streetcars.

Congressional District

If you do not know your congressional district, click on the Congressional Districts Map below. Then, type your address into the search bar and click Find District. Your congressional district will appear at the top of the page. <u>Congressional Districts Map</u>

Congressional District Arkansas's 2nd Congressional District

Project Manager

Please provide the following information about the project manager.

Project Manager Contact Information

Contact				
First Name	Last Name			
Jon	Wisniewski			
Title				
Grants Accountant				
Phone Type	Number	Extension		
Business	5013756717	1235		
Email				
jwisniewski@rrmetro.org				
Fax				
NONE PROVIDED				
<u>Address</u>				

Signature Document

Please download the signature form, complete and sign the form, and then upload it below. <u>Download Signature Form Here</u>

Signature

Signature document.pdf - 02/26/2021 10:21 AM Comment NONE PROVIDED

Programmatic Capability: Describe any past performance in successfully completing and managing projects similar in size, scope and relevance to the proposed project.

In 2015, METRO purchased 15 CNG buses. METRO purchased an additional seven CNG buses in 2017, followed by one CNG bus that was purchased in 2018. Buses are purchased according to Federal Transit Administration (FTA) guidelines. All purchases follow a standard RFP process that results in the lowest possible price. In 2016 and 2018, METRO was awarded two competitive grants totaling \$5,223,498 from the FTA to replace a total of 12 diesel buses that have outlived their useful lives. The existing diesel bus fleet is scheduled to be replaced by CNG buses by the end of 2025. A recent, related cost-saving tactic that has aided the agency in this endeavor is engaging in a joint bus procurement program with the Arkansas Department of Transportation and other agencies. (Criteria 4)

Describe other environmentally friendly measures the organization already practices.

METRO is currently in the process of converting its diesel powered bus fleet to a bus fleet that is powered by compressed natural gas (CNG). Construction was completed in 2015 for an on-site CNG fueling station. Since 2015, 23 of 59 diesel buses have been replaced with CNG buses. All diesel buses are planned to be replaced with CNG buses by the end of 2025. METRO is in the planning stages of purchasing EV buses and a charging station that are expected to go into service in 2022. Also, METRO has installed 20 bus shelters that include solar powered lighting. Public transit is also inherently environmentally friendly. A bus carrying as few as seven passengers is more fuel efficient than the average single occupant auto used for commuting. By using public transportation instead of driving, the elimination of one car can reduce carbon dioxide emissions by 30%. (Criteria 5)

Project Details (1 of 3)

Transit Bus 2008; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type Transit Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

This bus is used for fixed route public transit service in Little Rock, North Little Rock, and Pulaski County, AR. It is used 7 days a week. This bus has been operational in Arkansas since 2008. It is scheduled to be replaced by the end of 2024. The replacement bus will be operated in Arkansas for 100 percent of its operating time and will be in operation for up to 15 years. The replacement bus will also be CARB and EPA compliant.

Select the percentage of time the affected equipment will be operated in Arkansas. 100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type

Replace

Replace Type

Replace with CNG (including renewable landfill gas)

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2008

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 49730

Estimated Invoice Cost of New Equipment (\$) 550000

Estimated Delivery and/or Transportation Costs of the New Equipment (\$) 1200

Estimated Installation Costs, if applicable (\$) 0

Estimated Scrappage and Disposal Costs (\$) 0

Other Costs Related Directly to the Project (\$) 0

Explain the other costs. n/a

Sales Tax (\$) 0

Scrap Value (\$) 1000

Estimated Total Cost Per Vehicle (\$) 550200

Project Details (2 of 3)

Transit Bus 2008; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type

Transit Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

This bus is used for fixed route public transit service in Little Rock, North Little Rock, and Pulaski County, AR. It is used 7 days a week. This bus has been operational in Arkansas since 2008. It is scheduled to be replaced by the end of 2024. The replacement bus will be operated in Arkansas for 100 percent of its operating time and will be in operation for up to 15 years. The replacement bus will also be CARB and EPA compliant.

Select the percentage of time the affected equipment will be operated in Arkansas. 100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type

Replace

Replace Type

Replace with CNG (including renewable landfill gas)

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2008

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 49730

Estimated Invoice Cost of New Equipment (\$) 550000

Estimated Delivery and/or Transportation Costs of the New Equipment (\$) 1200

Estimated Installation Costs, if applicable (\$)

Estimated Scrappage and Disposal Costs (\$)

Other Costs Related Directly to the Project (\$)

0

Explain the other costs. n/a

Sales Tax (\$) 0

Scrap Value (\$) 1000

Estimated Total Cost Per Vehicle (\$) 550200

Project Details (3 of 3)

Transit Bus 2008; Replace

Answer the following questions for the vehicle to be replaced or repowered. If you have multiple vehicles being replaced or repowered, click the "Add New Project Details" button at the end of this section for each additional vehicle.

Vehicle Type

Transit Bus

Describe how, when, and where the vehicle to be replaced/repowered is used.

This bus is used for fixed route public transit service in Little Rock, North Little Rock, and Pulaski County, AR. It is used 7 days a week. This bus has been operational in Arkansas since 2008. It is scheduled to be replaced by the end of 2024. The replacement bus will be operated in Arkansas for 100 percent of its operating time and will be in operation for up to 15 years. The replacement bus will also be CARB and EPA compliant.

Select the percentage of time the affected equipment will be operated in Arkansas.

100%

Acronyms

CNG: Compressed Natural Gas LPG: Propane EV: All-Electric LNG: Liquefied Natural Gas

Project Type

Replace

Replace Type

Replace with CNG (including renewable landfill gas)

Select the engine model year of the vehicle to be repowered or replaced. NOTE: The model year must be within the 1992-2009 range. If the selected date falls outside of that range, then the project is not eligible. 2008

Estimated Total Cost

Please provide estimates for the costs of the project and scrap value of the engine or vehicle to be replaced as indicated in the fields below.

Please provide a dollar value for the following fields without using symbols, such as the dollar sign (\$), periods (.), or commas (,). For example, the dollar value '\$2,000' should be written as '2000'.

This form will automatically calculate the estimated total cost of your project and the maximum potential funding assistance percentage for your project.

Provide the annual miles of the vehicle to be repowered or replaced. 49730

Estimated Invoice Cost of New Equipment (\$)

550000

Estimated Delivery and/or Transportation Costs of the New Equipment (\$) 1200

Estimated Installation Costs, if applicable (\$) 0

Estimated Scrappage and Disposal Costs (\$) 0

Other Costs Related Directly to the Project (\$) 0

Explain the other costs. n/a

Sales Tax (\$) 0

Scrap Value (\$) 1000

Estimated Total Cost Per Vehicle (\$) 550200

Project Overview

Project Physical Location

Please provide the street address and county of the project.

Project Address

901 Maple St. North Little Rock, Arkansas 72114

County Pulaski

Infrastructure Availability

Fueling Station backup.pdf - 02/26/2021 09:40 AM

Comment

Attached is the final invoice for the CNG fueling station as well as applicable compensation milestones with the contract. Pictures included are (in order) CNG Fuel pump, CNG Tanks, CNG Compressor A, CNG Compressor B.

Total Number of Vehicles

1

Total Project Cost (\$) 1650600

Maximum Funding Amount That Can Be Requested from DEQ (\$) 1155420

Funding Amount Requested from DEQ (\$) 200000

My Cost Share (\$) 1450600

Project Milestones

Project Step	Estimated Date (MM/DD/YY)	
Solicit bids in newspaper of statewide circulation	9/3/2020	
Bid(s) awarded	5/18/2021	
Vehicle replaced/repowered	7/1/2022	
Old equipment scrapped	8/1/2022	
Final report to DEQ	9/1/2022	

Describe your approach to achieving project milestones.

METRO is part of a joint procurement for buses with the Arkansas Department of Transportation that is expected to be awarded to the winning proposal at the May 18, 2021 METRO board meeting. METRO has agreed to purchase at least eight CNG buses from this procurement and will be able to exercise an option on the award to purchase buses once a vendor has been awarded the contract. The buses will be delivered within a 12-14 month time frame. Outline agreement numbers and vendor number will be provided on all purchase orders as required. METRO will be able to drill the specified hole through the engine block, compromise the frame in house and scrap the bus being replaced. Once the vehicle is scrapped, the final report will be sent to ADEQ within a month. (Criteria 4)

Project Benefits

Describe the public benefit of this project.

This project will replace high mileage, heavy duty diesel transit buses with CNG transit buses. The new CNG buses will reduce NOx emissions by 99.2 percent. METRO provides service throughout Pulaski County, which produces the most NOx emissions in the state with more than 9,000 tons per year. (Criteria 1) This project will also help reduce the emissions by On-Road Diesel Heavy Duty Vehicles, the largest NOx producer by vehicle type in the state at 39 percent of NOx emissions. Of the Diesel-powered emissions in Arkansas, On-road Diesel Heavy Duty Vehicles, which transit buses are included in, produce 54 percent of emissions. According to the Diesel Emissions Quantifier provided by the Environmental Protection Agency, replacing these 3 diesel buses will provide a NOx reduction of .796 short tons per year. The reduction of NOx over the CNG buses 15 year lifetime will be 11.94 short tons. This will give this project a NOx emission reduction cost of \$8.38 per pound of NOx reduced over the life of the buses. (Criteria 2) This project will provide for a generous cost share from METRO. METRO is only requesting 13 percent of the total project cost to replace three diesel buses. (Criteria 6) According to the United States Department of Transportation, in 2017, the average household cost for transportation was \$9,737. This is the second-largest expense household expenditure category after housing costs. The cost to use METRO's services for 12 months is \$432. This represents significant savings over the cost of car ownership and provides a large economic benefit for the people who choose to use METRO.

Describe how this project will reduce environmental risks to economically-disadvantaged and other populations with disproportionately high and adverse human health or environmental impacts.

This project will reduce the amount of NOx by 99.2 percent, greenhouse gases by 4.48 percent and fine particulate matter by 48.8 percent produced by diesel buses. This will result in better air quality in and around the River Cities Travel Center (RCTC), where there is a daily concentration of buses that are running 23 routes. This concentration of buses lowers the air quality at the RCTC. In 2018, there were 1,480,659 boardings and alightings at the RCTC. In 2019, there were 1,719,411 boardings and alightings at the RCTC. In 2020, there were 1,240,900 boardings and alightings at the RCTC, during a time of reduced service and capacity due to COVID-19. METRO's ridership is comprised of racial and ethnic minorities with economically disadvantaged backgrounds.

Describe how this project will reduce environmental risks to the public and sensitive populations.

Replacing the diesel buses with CNG buses will lower the environmental risks of the current diesel buses that contribute to inflammation of the airways, respiratory conditions, reduced lung function and increased response to allergens. The majority of METRO's customers are made up of individuals from sensitive populations. This project will reduce the amount of NOx emissions by 99.2 percent, greenhouse gas emissions by 4.48 percent, and fine particulate matter emissions by 48.8 percent. The benefits for the region's air quality are shared by all who live in Pulaski County. CNG buses are also up to ten decibels quieter than a diesel bus. (Criteria 3)

Describe how the project will contribute to the widespread adoption of alternative fuels and advance the establishment of alternative fuel corridors.

This project will give CNG a greater visible presence in central Arkansas. All of the CNG buses proudly state in large lettering that they are powered by CNG. METRO has also participated in the statewide CNG rally that promotes using CNG as a source for clean energy. Recently, METRO welcomed members of the Clean Cities Coalition to a tour of its CNG buses and CNG facilities. The current on-site CNG fueling only has the capacity to fuel approximately 45 vehicles. As the diesel bus fleet is replaced with CNG buses, the capacity of this facility will be upgraded to have the capacity to fuel at least 59 buses. Giving public access to the facility will be a possibility at that time. METRO facilities are located within a half-mile from Interstate 30 in North Little Rock. METRO has successfully operated its CNG fueling station for more than four years. During this time, METRO has purchased gas from suppliers within the state, bolstering the Arkansas business landscape for natural gas suppliers by being a stable purchaser of a more environmentally friendly fuel.

Attachments

Date	Attachment Name	Context	User
2/26/2021 10:21 AM	Signature document.pdf	Attachment	Jon Wisniewski
2/26/2021 9:40 AM	Fueling Station backup.pdf	Attachment	Jon Wisniewski