

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary State of Arkansas

Lead Agency Authorized to Act on Behalf of the Beneficiary Arkansas Department of Energy and 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
Funding Request No.	4
Request Type: (select one or more)	<input type="checkbox"/> Reimbursement <input type="checkbox"/> Advance <input checked="" type="checkbox"/> Other (specify): Reimbursement for program development administrative costs Advance funding for projects and DEQ program administration costs
Payment to be made to: (select one or more)	<input checked="" type="checkbox"/> Beneficiary <input checked="" type="checkbox"/> Other (specify): A funding request directing administrative costs will be submitted separately. A 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)	<input checked="" type="checkbox"/> Attached to this Certification <input type="checkbox"/> To be Provided Separately

SUMMARY

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

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

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

Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):

The table below represents the proposed project that DEQ during the Clean Fuels program year one.

DEQ requests approval from the Trustee to replace the vehicles listed in the table below.

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

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 Unit 1.

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

DEQ will also submit a reimbursement request 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 <https://afleet-web.es.anl.gov/hdv-emissions-calculator/>

Proposed projects	Replacement technology	New Vehicle NOx (lb.) Emissions benefits	New Vehicle Cost NOx (lb.) cost effectiveness
Jacksonville North Pulaski School District Bus #1	Propane	1927.34	\$34
Rock Region Metropolitan Transit Authority Bus #1	CNG	3822.81	\$17
Rock Region Metropolitan Transit Authority Bus #2	CNG	3755.51	\$18
Rock Region Metropolitan Transit Authority Bus #3	CNG	3891.24	\$17
Pulaski County Special School District Bus #1	Propane	1461.93	\$45
Pulaski County Special School District	Propane	1927.34	\$34

Bus #2

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 <https://www.ADEQ.state.ar.us/air/planning/vw.aspx>. 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 <https://www.ADEQ.state.ar.us/air/planning/vw.aspx>, 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 areas in Pulaski County, which contain much of the Little Rock metropolitan area, parts of which contain communities that have historically borne a disproportionate share of the adverse impacts of such emissions.

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 Action Implementation (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, the State of Arkansas, 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: _____



William Montgomery
Associate Director, Office of Air Quality

Arkansas Department of Energy and Environment
[LEAD AGENCY]

for

State of Arkansas
[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 1 received 3 proposals for eligible mitigation action Item 2: Class 4-8 School Bus, or Transit Bus. DEQ proposes to replace 3 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) specifying the terms of the project.	August, 2020
Project Manager certifies project completion and provides required documentation to DEQ.	Within 6 Months of Signature of MOA Est. February 2021
DEQ completes review of Project Manager documentation and certifies payment direction to disbursing agent	Within 30 days 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 \$735,294 has been allocated to the Clean Fuels Program year one, with an estimated \$697,794 to be awarded to program participants for completing projects and no more than \$110,294 for administrative costs associated with running the program.

Period of Performance: Fall <u>2019</u> to Winter 2020/2021
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Budget Category	Share of Total Program Budget to be funded by the Trust	Estimated Cost-Share (Project Sponsor)
Program Participants Support	\$399,150	\$1,340,950
Administrative	\$70,438	\$0
Project Totals	\$469,588	\$1,340,950

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. The amounts in this table reflect only the portion of Arkansas’s allocation allotted to the Clean Fuels Program in the Arkansas Beneficiary Mitigation Plan. Because specific projects that will be awarded under this program will depend upon applications received, cost share and total project costs—which includes cost share—have not been included in the table below.

Project Trust Allocations	2019	2020
1. Anticipated Annual Project Funding Request to be paid through the Trust		\$469,588.24
2. Anticipated Annual Cost Share		\$1,340,950.00
3. Anticipated Total Project Funding by Year (line 1 plus line 2)		\$1,810,538.24
4. Cumulative Trustee Payments Requested to Date Against Cumulative Beneficiary Allocation (DERA Go RED! and Level 2 EVSE)	\$275,066.00	\$1,568,200.00
5. Current Beneficiary Project Funding to be Paid through Trust (line 1)		\$469,588.24
6. Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$275,066.00	\$2,037,788.24
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$14,647,709.09	\$14,372,643.09
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (Line 7 minus line 6)	\$14,372,643.09	\$12,334,854.85

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 <https://www.ADEQ.state.ar.us/air/planning/vw.aspx>. 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
 - State,
 - County,
 - City,
 - ZIP Code
- Eligible Vehicle/Equipment Information
 - Vehicle Size Class
 - Vehicle Type
 - Vehicle Identification Number
 - Vehicle Make
 - Vehicle Model
 - Vehicle Model Year

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

ATTACHMENT D
Detailed cost estimate from selected or potential vendors for each proposed expenditure exceeding \$25,000

DEQ's Clean Fuels program provides reimbursement for proposed projects according to the funding limits and mandatory cost-Share requirements provided by the VW Mitigation . The following attachments are the estimated cost provided in the Applicants applications. Final documentation of actual expenses will be required upon completion of projects listed in the applications prior to reimbursement request.

Table of Contents

Table of Contents	1
Arkansas Clean Fuels Program	2
(Submission #: HNV-EJTD-0TXSB, version 1)	2
Details	2
Form Input	2
Organization	2
Project Details (1 of 1)	3
School Bus 2002; Replace	3
Project Overview	4
Project Milestones	5
Project Benefits	5
Attachments	6
Internal Data	6
Status History	6
Audit	7
Processing Steps	7

Arkansas Clean Fuels Program

version 1.5

(Submission #: HNV-EJTD-0TXSB, version 1)

Details

Form Alias Arkansas Clean Fuels Program
Form Started 11/21/2019 9:22 AM by Phillip Lloyd
Form Submitted 11/30/2019 10:09 PM by Phillip Lloyd
Submission # HNV-EJTD-0TXSB
Status Submitted
AFIN: 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.

Our school district transports over 3,000 students 178 days a year. We have 188 Routes using 42 Buses. We have 6 spare buses to use when any of the other 42 buses are down. We also 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.

[Congressional Districts Map](#)

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**
Business 501-234-2163

Email
BHickingbotham@jnpsd.org

Fax
501-234-2162

Address

Signature

ADEQ Electronic Signature Agreement.pdf - 11/30/2019 10:07 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 to 5 to 8 scholars every day to our 188 routes. Our mechanics service and maintain 50 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 1)

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 to one of our 7 schools within Pulaski County.

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 (\$)

97500.00

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

0.00

Estimated Installation Costs, if applicable (\$)

0.00

Estimated Scrappage and Disposal Costs (\$)

0.00

Other Costs Related Directly to the Project (\$)

0.00

Explain the other costs.

N/A

Sales Tax (\$)

0.00

Scrap Value (\$)

0.00

Estimated Total Cost Per Vehicle (\$)

97500

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.docx - 11/21/2019 01:27 PM

Comment

NONE PROVIDED

Total Number of Vehicles

1

Total Project Cost (\$)

97500

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

68250

Funding Amount Requested from ADEQ (\$)

68250

My Cost Share (\$)

29250

Project Milestones

Project Step	Estimated Date (MM/DD/YY)
Solicit bids in newspaper of statewide circulation	1/2/2020
Bid(s) awarded	2/3/2020
Vehicle replaced/repowered	5/29/2020
Old equipment scrapped	6/30/2020
Final report to ADEQ	7/17/2020

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 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, methane, 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 kids riding in them and the communities in which they drive. According to a West Virginia University study released this year, 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
11/30/2019 10:07 PM	ADEQ Electronic Signature Agreement.pdf	Attachment	Phillip Lloyd
11/21/2019 1:27 PM	AmeriGas LPG Proposal.docx	Attachment	Phillip Lloyd

Internal Data

Label	Value
Completeness Check	12/02/2019
Application Complete	Yes
Application Scored	
Application Score	
Application Recommended for Funding	
MOA Executed	
Reimbursement Packet Received	
Payment Sent	

Status History

	User	Processing Status
11/21/2019 9:22:34 AM	Phillip Lloyd	Draft
11/30/2019 10:09:24 PM	Phillip Lloyd	Submitted

Audit

Event	Event Description	Event By	Event Date
Submission Locked	Submission Locked	Deiona McKnight	12/2/2019 7:48 AM
Submission Unlocked	Submission Unlocked	Deiona McKnight	12/2/2019 7:54 AM
Submission Locked	Submission Locked	Deiona McKnight	12/2/2019 11:33 AM

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Form Submitted	Phillip Lloyd	11/30/2019 10:09:24 PM
Review Submission (Budget Coordinator)	Deiona McKnight	12/2/2019 7:54:59 AM

Table of Contents

Table of Contents	1
Arkansas Clean Fuels Program	2
(Submission #: HNS-GN0S-3H3X0, 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
Internal Data	7
Status History	7
Audit	7
Processing Steps	8
Revisions	8

Arkansas Clean Fuels Program

version 1.5

(Submission #: HNS-GN0S-3H3X0, version 1)

Details

Form Alias Arkansas Clean Fuels Program
Form Started 9/3/2019 2:52 PM by Charles W Blake
Form Submitted 9/3/2019 4:56 PM by Charles W Blake
Submission # HNS-GN0S-3H3X0
Status Revised
Active Steps Review Submission (Budget Coordinator)
AFIN: 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.

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.

[Congressional Districts Map](#)

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**

Charles Blake

Title

Director of Transportation

Phone Type **Number** **Extension**

Business 5012342916

Email

cblake@pcssd.org

Fax

5014900633

Address

Signature

20190903145801389.pdf - 09/03/2019 03:02 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.

The Pulaski County Special School District currently operates 215 school buses all diesel-fueled. 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 a 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. Two 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 the, recycle of 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. Bus 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.

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.

12711

Estimated Invoice Cost of New Equipment (\$)

93000

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

0.00

Estimated Installation Costs, if applicable (\$)

0.00

Estimated Scrappage and Disposal Costs (\$)

2000.00

Other Costs Related Directly to the Project (\$)

0.00

Explain the other costs.

no other cost.

Sales Tax (\$)

0.00

Scrap Value (\$)

1500.00

Estimated Total Cost Per Vehicle (\$)

93500

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. Bus 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.

13473

Estimated Invoice Cost of New Equipment (\$)

93000

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

0.00

Estimated Installation Costs, if applicable (\$)

0.00

Estimated Scrapage and Disposal Costs (\$)

2000.00

Other Costs Related Directly to the Project (\$)

0.00

Explain the other costs.

no other cost

Sales Tax (\$)

0.00

Scrap Value (\$)

1500.00

Estimated Total Cost Per Vehicle (\$)

93500

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

[20190903145801389.pdf - 09/03/2019 04:14 PM](#)

Comment

NONE PROVIDED

NOTE (CREATED)

Incorrect Attachment

The attachment provided is another signature. We are looking for details on the availability of existing fueling stations or proposed fueling stations

Created on 9/4/2019 9:59 AM by **Deiona McKnight**

Total Number of Vehicles

2

Total Project Cost (\$)

187000

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

130900

Funding Amount Requested from ADEQ (\$)

130900

My Cost Share (\$)

56100

Project Milestones

Project Step	Estimated Date (MM/DD/YY)
Solicit bids in newspaper of statewide circulation	12/1/2019
Bid(s) awarded	1/6/2020
Vehicle replaced/repowered	3/4/2020
Old equipment scrapped	3/4/2020
Final report to ADEQ	4/1/2020

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 January 6, 2020, 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, district learn 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 of Students: Diesel exhaust produces particulate matter that aggravates asthma and other conditions. With propane, there's so 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
9/3/2019 4:14 PM	20190903145801389.pdf	Attachment	Charles Blake
9/3/2019 3:02 PM	20190903145801389.pdf	Attachment	Charles Blake

Internal Data

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

Status History

	User	Processing Status
9/3/2019 2:52:05 PM	Charles W Blake	Draft
9/3/2019 4:56:03 PM	Charles W Blake	Submitted
9/4/2019 10:54:41 AM	Charles W Blake	Revised

Audit

Event	Event Description	Event By	Event Date
Submission Locked	Submission Locked	Deiona McKnight	9/4/2019 9:51 AM
Submission Unlocked	Submission Unlocked	Deiona McKnight	9/4/2019 10:02 AM

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Form Submitted	Charles W Blake	9/3/2019 4:56:03 PM
Review Submission (Budget Coordinator)	Deiona McKnight	

Revisions

Revision	Revision Date	Revision By
Revision 1	9/3/2019 2:52 PM	Charles W Blake
Revision 2	9/4/2019 10:54 AM	Charles W Blake

Table of Contents

Table of Contents	1
Arkansas Clean Fuels Program	2
(Submission #: HNT-K75X-5RA9Q, 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)	4
Transit Bus 2008; Replace	4
Project Details (3 of 3)	6
Transit Bus 2008; Replace	6
Project Overview	7
Project Milestones	7
Project Benefits	8
Attachments	8
Internal Data	9
Status History	9
Audit	9
Processing Steps	9

Arkansas Clean Fuels Program

version 1.5

(Submission #: HNT-K75X-5RA9Q, version 1)

Details

Form Alias Arkansas Clean Fuels Program
Form Started 10/17/2019 2:37 PM by Jon Wisniewski
Form Submitted 11/27/2019 1:10 PM by Jon Wisniewski
Submission # HNT-K75X-5RA9Q
Status Submitted
AFIN: 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, Maumelle, Sherwood, Jacksonville 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.

[Congressional Districts Map](#)

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

Jon

Last Name

Wisniewski

Title

Grants Accountant

Phone Type

Business

Number

501-375-6717

Extension

235

Email

jwisniewski@rrmetro.org

Fax

NONE PROVIDED

Address

Signature

signature.pdf - 11/26/2019 01:17 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.

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. Also, METRO has installed 20 bus shelters that include solar powered lighting. These shelters provide an environmentally friendly, safe, and weather shielded location for passengers. In a partnership with Metroplan, METRO participates in Ozone Action Days-Ditch the Keys by offering a fare-free day to the public. 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, Maumelle, Sherwood, Jacksonville 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 (\$)

485000

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 (\$)

485200

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, Maumelle, Sherwood, Jacksonville 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.

47954

Estimated Invoice Cost of New Equipment (\$)

485000

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

1200

Estimated Installation Costs, if applicable (\$)

0

Estimated Scrapage 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 (\$)

485200

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, Maumelle, Sherwood, Jacksonville 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.

51536

Estimated Invoice Cost of New Equipment (\$)

485000

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 (\$)

485200

Project Overview**Project Physical Location**

Please provide the street address and county of the project.

Project Address901 MAPLE ST
N LITTLE ROCK, AR 72114**County**

Pulaski

Infrastructure Availability[Fueling Station backup.pdf - 11/27/2019 11:44 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

3

Total Project Cost (\$)

1455600

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

1018920

Funding Amount Requested from ADEQ (\$)

200000

My Cost Share (\$)

1255600

Project Milestones

Project Step	Estimated Date (MM/DD/YY)
Solicit bids in newspaper of statewide circulation	12/15/2019
Bid(s) awarded	2/1/2020
Vehicle replaced/repowered	3/31/2021
Old equipment scrapped	4/30/2021
Final report to ADEQ	5/31/2021

Project Step	Estimated Date (MM/DD/YY)
--------------	---------------------------

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 solicited in December 2019. METRO has agreed to purchase at least eight CNG buses from this procurement and will be able to purchase buses at will 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 14 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. 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
11/27/2019 11:44 AM	Fueling Station backup.pdf	Attachment	Jon Wisniewski
11/26/2019 1:17 PM	signature.pdf	Attachment	Jon Wisniewski

Internal Data

Label	Value
Completeness Check	12/01/2019
Application Complete	Yes
Application Scored	
Application Score	
Application Recommended for Funding	
MOA Executed	
Reimbursement Packet Received	
Payment Sent	

Status History

	User	Processing Status
10/17/2019 2:37:44 PM	Jon Wisniewski	Draft
11/27/2019 1:10:35 PM	Jon Wisniewski	Submitted

Audit

Event	Event Description	Event By	Event Date
Submission Locked	Submission Locked	Deiona McKnight	12/2/2019 11:28 AM

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Form Submitted	Jon Wisniewski	11/27/2019 1:10:35 PM
Review Submission (Budget Coordinator)	Deiona McKnight	12/2/2019 11:32:19 AM