

APPENDIX D-4
Beneficiary Eligible Mitigation Action Certification

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary State of Utah

Lead Agency Authorized to Act on Behalf of the Beneficiary Department of Environmental Quality
(Any authorized person with delegation of such authority to direct the Trustee delivered to the Trustee pursuant to a Delegation of Authority and Certificate of Incumbency)

Action Title:	Class 4-8 School Bus, Shuttle Bus, and Transit Bus
Beneficiary's Project ID:	Buses - 2019
Funding Request No.	<i>(sequential)</i> 2
Request Type: (select one or more)	<input type="checkbox"/> Reimbursement <input checked="" type="checkbox"/> Advance <input type="checkbox"/> Other (specify): _____
Payment to be made to: (select one or more)	<input checked="" type="checkbox"/> Beneficiary <input type="checkbox"/> Other (specify): _____
Funding Request & Direction (Attachment A)	<input checked="" type="checkbox"/> Attached to this Certification <input type="checkbox"/> To be Provided Separately

SUMMARY

Eligible Mitigation Action	<input checked="" type="checkbox"/> Appendix D-2 item (specify): <u>Class 4-8 School Bus, Shuttle Bus, or Transit Bus</u>
Action Type	<input checked="" type="checkbox"/> 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): See Summary Attachment.	
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2): See Summary Attachment.	
Estimate of Anticipated NOx Reductions (5.2.3): See Summary Attachment.	
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): See Summary Attachment.	
Describe how the Beneficiary will make documentation publicly available (5.2.7.2). See Summary Attachment.	
Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8). See Summary Attachment.	
Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9). See Summary Attachment.	

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).
See Summary Attachment.

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 State of Utah, 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: 12/16/2019



Bryce C. Bird
Director

Utah Department of Environmental Quality

[LEAD AGENCY]

for

State of Utah

[BENEFICIARY]

PROJECTED TRUST ALLOCATIONS:

	2017	2018	2019	2020	2021
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$	\$	\$ 23,259,951	\$	\$
2. Anticipated Annual Cost Share	\$	\$	\$ 13,551,741	\$	\$
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$	\$	\$ 36,811,692	\$	\$
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$	\$	\$ 4,139,657	\$	\$
5. Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$	\$	\$ 23,259,951	\$	\$
6. Total Funding Allocated to for Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$	\$	\$ 27,399,608	\$	\$
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$	\$	\$ 34,685,021	\$	\$
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 7 minus line 6)	\$	\$	\$ 7,285,413	\$	\$

Summary Attachment

Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1)

The Utah Department of Environmental Quality (UDEQ) is requesting a total of \$19,200,000 from the State of Utah's Volkswagen Trust (VW Trust) for Category 2, Class 4-7 School Bus, Shuttle Bus, or Transit Bus, administrative costs of \$1,632,000 (8.5%), and \$2,427,951 for the Diesel Emission Reduction Act (DERA) category (7%).

The State of Utah's Beneficiary Mitigation Plan (UBMP) was submitted to Wilmington Trust in June 2018 and accepted by Wilmington Trust in February 2019. As described in pages 12-14 of the UBMP, the State has allocated 73.5% of the VW Trust to Categories 1, 2 and 6 for public fleets, 8.5% for administrative costs, and 7% for the DERA category (see page 12-14 of the UBMP), an area for private fleets to participate. The UBMP was developed based on input from an advisory committee and public input process (detailed in pages 8-10 of UBMP), which resulted in support of a portion of the State's VW Trust to be allocated to these categories. Lastly, the UDEQ will use the DERA funds as a match to the base amounts provided by the Environmental Protection Agency through the State Clean Diesel Grant Program for federal fiscal years 2017-2026.

The selected projects represented in this Funding Request were prioritized, in part, by their ability to assist the State in achieving the goals of the UBMP (page 10-11). In the plan, the UDEQ states that achieving "NO_x reductions that work toward fully mitigating the excess lifetime NO_x emissions from the non-compliant VW vehicles and contribute to the State's ongoing goal of reaching attainment of the National Ambient Air Quality Standards." As such, the scoring structure for which projects were prioritized weighed NO_x reductions and associated costs the heaviest of all criteria.

To further achieve the goals stated in the UBMP, the UDEQ reserved eligibility for the VW Trust to government entities throughout the state, providing both economic and air quality benefits to tax payers (page 11 of the UBMP).

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

As a result of a competitive application process, the UDEQ selected five school districts and two government entities to receive VW Trust funds for Category 2, Class 4-7 School Bus, Shuttle Bus, or Transit Bus. These projects were prioritized and selected based on their reduction of nitrogen oxides (NO_x), cost-per-ton of NO_x reduced, value to the nonattainment areas, and community benefits. Projects were also evaluated for their contribution to emerging vehicle technologies that result in long-term emissions benefits. The vehicles selected for funding in this category are diesel school buses and transit buses with operations that impact the nonattainment areas. Over half of the selected vehicles will be replaced with all-electric, supporting a larger-scale collaborative effort by local municipalities to adopt cleaner mass transit options with connectivity to job centers, healthcare facilities, the Salt Lake International Airport, and other amenities provided in the urban areas. Awardees have three years upon execution of grant agreements to complete the vehicle projects.

Any unused funds from current awards and projects still yet to be determined will be used toward other prioritized vehicle projects in this category.

The following is a detailed description of the currently selected projects:

State of Utah VW Settlement Awards Class 4-8 School Bus, Shuttle Bus and Transit Bus Category			
Awardee	Vehicle Replacement Type	Award Amount	# of Vehicles Awarded
Canyons School District	Diesel School Bus Replacements to Diesel	\$826,000	14
City of Orem	Diesel Shuttle Bus Replacement to Diesel	\$87,500	1
Davis School District	Diesel School Bus Replacements to Diesel	\$136,260	2
Jordan School District	Diesel School Bus Replacements to Diesel	\$138,992	2
Park City Municipal Corp	Diesel Transit Bus Replacements to Electric	\$3,693,941	6
Salt Lake City School District	Diesel School Bus Replacements to Electric	\$699,660	4
Tooele County School District	Diesel School Bus Replacements to Diesel	\$132,000	2
Utah Transit Authority	Diesel Transit Bus Replacements to Electric	\$13,079,240	20
	Total Current Projects	\$18,793,593	51
Additional Class 4-8 School Bus, Shuttle Bus, or Transit Bus Projects	To Be Determined	\$406,407	To Be Determined
	Total	\$19,200,000	

Estimate of Anticipated NO_x Reductions

	Estimated Annual NO _x Reductions (tons)	Estimated Lifetime NO _x Reductions (tons)
Current School Bus and Shuttle Bus Projects	16	55
Future Projects	TBD	TBD

Identification of Government Entity Responsible for Reviewing and Auditing Expenditures of Eligible Mitigation Action Funds to Ensure Compliance with Applicable Law (5.2.7.1):

The Utah Division of Air Quality will review expenditures and supporting documentation of Eligible Mitigation Action Funds to ensure payments made to awardees are the result of eligible costs and compliance with the VW Trust Agreement.

The Audit Manager for the Utah Department of Environmental Quality, Executive Director's Office, will serve in an independent capacity to prevent conflicts of interest and be responsible for auditing the State of Utah's VW Trust.

Describe How the Beneficiary will Make Documentation Publicly Available (5.2.7.2)

Unless classified, pursuant to state or federal law, as a private, protected or controlled record or subject to federal or court protection, the UDEQ shall make available on its public-facing website: 1) records submitted by Utah to the Trustee and all supporting funding request documentation, except Attachment A, Funding Request and Direction, which contains specific bank and financial authorization information; and 2) all supporting trust fund expenditure documentation until the Termination Date¹. Following submittal to the Trustee, upon written request, individuals may directly review funding request documentation during office hours at the Utah Division of Air Quality in accordance with existing state law². A copy may be provided upon written request within 10 business days. The public may submit requests electronically, by U.S. postal or commercial delivery or in person.

Public funding requests and expenditure documentation shall be continually available on the UDEQ's public-facing website regarding the Trustee's decision for each request. Utah further expects to make available documentation supporting expenditures for all ongoing eligible mitigation actions funded in accordance with the Trust Agreement.

Describe Any Cost-Share Requirement to be Placed on Each NO_x Source Proposed to be Mitigated

Although the UDEQ has targeted government-owned fleets in which 100% funding is allowed under the consent decree for vehicle and engine replacement projects, the UDEQ has required a 50% cost-sharing for the new replacement vehicles; however, 45% cost-sharing is required for new California Air Resources Board's (CARB) Optional Low-NO_x replacement vehicles and 35% cost-sharing for new all-electric replacement vehicles, including the electric vehicle charging infrastructure.

Describe how the Beneficiary Complied with Subparagraph 4.2.8, Related to Notice to U.S. Government Agencies (5.2.9).

On February 13, 2018, the UDEQ emailed notification of the State of Utah's beneficiary status to the following air quality department contacts at the U.S. Department of the Interior and the U.S. Department of Agriculture with control or management of land within or contiguous to the territorial boundaries of the State of Utah: Tim Allen of the U.S. Fish and Wildlife Service, National Park Service, Air Resources Division; Linda Geiser, National Air Program Manager, U.S. Department of Agriculture; and Bret Anderson, National Air Modeling Coordinator, U.S. Department of Agriculture.

The letter announced the beneficiary status for the State of Utah, the purpose of the Trust, and a description of the Beneficiary Mitigation Plan. The letter was emailed with a follow-up certified copy sent to Tim Allen of the U.S. Fish and Wildlife Service, National Park Service after failure to deliver the email.

¹ Termination Date is the date the Trust is terminated.

² Utah Code Annotated 63G-2-201.

If Applicable, Describe How the Mitigation Action Will Mitigate the Impacts of NO_x Emissions on Communities That Have Historically Borne a Disproportionate Share of the Adverse Impacts of Such Emissions.

The school bus, shuttle bus, and transit bus replacement projects that have been selected for funding were prioritized, in part, by their location within the State's nonattainment and environmental justice areas.

Combined with unique topography, geography, and meteorology, NO_x emissions are conducive to areas of the state exceeding the National Ambient Air Quality Standards set by EPA for 24-hour PM_{2.5} and ozone. More than 80% of the state's population live and work in these areas that are also impacted by heavy freight traffic for highway, rail, inter-modal, pipeline, and air freight for the Western U.S.

Using geographic Information system mapping, the UDEQ evaluated each project based on their primary locations and daily/weekly/seasonal operation schedule. Project locations that occurred where nonattainment and environmental justice areas overlapped received higher scores. The environmental justice factors that were evaluated included: low income; sensitive age groups; exposure to diesel particulate matter, ozone and PM_{2.5} concentrations; cancer risk; respiratory hazard index; proximity to industrial development; and traffic proximity.

Attachment B

Project Management Plan Project Schedule and Milestones

Milestone	Date
UDEQ submits Environmental Mitigation Plan to VW Trustee.	June 2018
UDEQ opens application period for government entities to submit Class 4-8 local freight truck, school bus, shuttle bus, and transit bus projects to be considered for VW Mitigation Trust Funds.	October - November 2018
UDEQ announces successful Class 4-8 local freight truck, school bus, shuttle bus, and transit bus projects to public.	August 2019
UDEQ issues Conditional Approval Letters to successful awardees.	August 2019
Awardees submit procurement documentation including: a detailed explanation of their local procurement rules; a detailed description of how their estimated project costs; and a list of likely potential vendors from which purchases will be made.	August - September 2019
VW Eligible Mitigation Action Agreements executed between awardees and UDEQ.	December 2019 - January 2020
UDEQ submits D-4 Funding Request to Trustee.	December 2019
Trustee acknowledges receipt of D-4 Funding Request.	December 2019 - February 2020
Trustee provides direction for D-4 Funding Request.	March 2020
UDEQ posts each funding request on public-facing website.	March 2020
Awardees begin projects to be completed within a three-year project period.	March 2020- March 2023
Awardees provide UDEQ quarterly status reports and UDEQ provides Trustee semi-annual report describing the progress implementing the Eligible Mitigation Actions.	March 2020 - March 2023
Awardees provide final invoices and required documentation as detailed in grant agreements to UDEQ for review, approval, and reimbursement.	March 2020 - March 2023
UDEQ reviews final invoices and documentation and issues reimbursement payments to awardees.	March 2020 - March 2023
UDEQ posts documentation and records supporting all expenditures on public-facing website.	March 2020 - March 2023
UDEQ reports project completion.	April 2023

Attachment B
Budget
Class 4-8 School Bus, Shuttle Bus, and Transit Bus Category

Awardee	Vehicle Replacement Type	Award Amount *	# of Vehicles Awarded	Cost-Share Amount
Canyons School District	Diesel School Bus Replacements to Diesel	\$826,000	14	\$826,000
City of Orem	Diesel Shuttle Bus Replacement to Diesel	\$87,500	1	\$87,500
Davis School District	Diesel School Bus Replacements to Diesel	\$136,260	2	\$136,260
Jordan School District	Diesel School Bus Replacements to Diesel	\$138,992	2	\$138,992
Park City Municipal Corp	Diesel Transit Bus Replacements to Electric	\$3,693,941	6	\$2,585,759
Salt Lake City School District	Diesel School Bus Replacements to Electric	\$699,660	4	\$489,762
Tooele County School District	Diesel School Bus Replacements to Diesel	\$132,000	2	\$132,000
Utah Transit Authority	Diesel Transit Bus Replacements to Electric	\$13,079,240	20	\$9,155,468
	Total Current Projects	\$18,793,593	51	\$13,551,741
Additional Class 4-8 School Bus, Shuttle Bus, or Transit Bus Projects	To Be Determined	\$406,407	To Be Determined	To Be Determined
	Total	\$19,200,000		
	Administrative Costs @ 8.5%	\$1,632,000		
	DERA Allocation	\$2,427,951		
	Total Request	\$23,259,951		

*In the event that actual costs are less than the award, the remaining funds will be redirected to the additional projects.

Attachment C

Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.12)

In accordance with Approved Trust Agreement ¶ 5.3, Utah shall submit to the Trustee semiannual reports for each approved environmental mitigation action that includes a description of the status (including actual or projected termination date), development, implementation, and any modifications that occur for the reporting period.

To ensure timeliness and accuracy in its reporting to the Trustee, the UDEQ will contractually obligate subrecipients to provide quarterly reports to the UDEQ that describe their progress in completing their project including timelines, accomplishments, and any issues that may have occurred during the reporting period.

Utah intends to post the initial report and subsequent semiannual reports on its public-facing website.

FISCAL YEAR 2017

STATE CLEAN DIESEL GRANT PROGRAM

WORK PLAN AND BUDGET NARRATIVE TEMPLATE

INSTRUCTIONS: States and territories applying for FY 2017 DERA State Clean Diesel Grant Program funding must use this template to prepare their Work Plan and Budget Narrative.

Please refer to the FY 2017 STATE CLEAN DIESEL PROGRAM INFORMATION GUIDE for full Program details, eligibility criteria and funding restrictions, and application instructions.

SUMMARY PAGE

Project Title: FY18 State Clean Diesel Grant Program- State of Utah

Project Manager and Contact Information

Organization Name: Utah Department of Environmental Quality (UDEQ), Division of Air Quality (DAQ)

Project Manager: Lisa Burr, Becky Close

Mailing Address: P.O. Box 144820, Salt Lake City, UT 84116

Phone: 801-536-4019, 801-536-4013

Fax: 801-536-4099

Email: lburr@utah.gov, bclose@utah.gov

Project Budget Overview:

	FY 2017*	FY 2018
EPA Base Allocation	\$232,312	\$274,999
State or Territory Matching Funds (if applicable)	\$275,400	\$275,400
EPA Match Incentive (if applicable)	\$116,156	\$137,500
Mandatory Cost-Share	\$756,800	\$834,900
TOTAL Project	\$1,380,614	\$1,522,799

*FY 2017 budget is only for states and territories with open FY 2017 State DERA grants

Project Period

October 1, 2018 – September 30, 2019

Summary Statement

Insert a brief paragraph that summarizes the proposed project. Please include the state webpage URL that details past DERA State Clean Diesel Program projects, if applicable.

The Utah Division of Air Quality (UDAQ) proposes to use FY 2017- 2018 State Clean Diesel Program funds for diesel school bus replacements to all-electric school buses. Priority given to school buses that operate in the Logan, Provo, and Salt Lake, UT, PM_{2.5} non-attainment areas.

The webpage URL for Utah Clean Diesel Projects is: cleandiesel.utah.gov.

SCOPE OF WORK

This section is a discussion of the state's or territory's plan to develop and implement grant, rebate, and/or loan programs and how these programs meet state or territory goals as they relate to the reduction of diesel emissions.

The scope of work should contain a detailed project description, including the following categories and information.

STATE/TERRITORY GOALS AND PRIORITIES: *A description of the air quality within the state or territory, the quantity of air pollution produced by the diesel fleet in the state or territory, and the primary sectors (e.g. highway, marine vessels, construction equipment) that make up the state's or territory's diesel fleet (both public and private).*

The Utah Department of Environmental Quality (UDEQ), Division of Air Quality (DAQ) is proposing to target PM_{2.5} (particulate matter), NO_x (nitrogen oxides), and VOC (volatile organic compounds) emissions through the diesel emissions reduction activity of replacing diesel school buses with all-electric in the Logan, Salt Lake, and Provo, UT, 24-hour PM_{2.5} nonattainment areas in an effort to comply with the National Ambient Air Quality Standards (NAAQS).

In certain areas of Utah, exceedances of the 24-hour PM_{2.5} standard occur in the winter months when temperature inversions occur. The Wasatch Mountains, Oquirrh Mountains, and Traverse Mountains create a bowl that surrounds lowland valleys where Utah's population is concentrated. This unique topography blocks horizontal air movement, causing air masses to stagnate in those population centers where vehicles are abundant. During the cold winter months, temperature inversions develop where a warmer air mass sits on top of a colder air mass. Very little vertical air exchange happens during an inversion and the warm air acts as a lid on top of a bowl, trapping air and pollution. Primary and secondary PM_{2.5} build and cannot dissipate until a strong weather system moves through the lowland valleys. The air stagnation and pollution buildup results in exceedances of the 24-hour PM_{2.5} National Ambient Air Quality Standards. Consequently, the EPA has classified the Provo and Salt Lake areas as serious nonattainment areas for 24-hour PM_{2.5} and the Logan area as a moderate nonattainment area for PM_{2.5}.

More than 80% of the state's population live and work in the Salt Lake and Provo PM_{2.5} nonattainment portions of the Wasatch Front where construction projects and major transportation systems are most prevalent. Because the Wasatch Front is only approximately 18 miles wide, most of the land within this area has been developed and has experienced rapid growth from Utah's aggressive economic development trends. The Wasatch Front is a central point for national freight distribution and is home to thousands of warehouses, distribution centers, and terminals for the country's largest trucking companies, carriers, and suppliers, creating a high presence of diesel freight traffic, over 1,064,365,750 vehicle miles traveled, that contribute to over 19,674 tons of pollution annually.

North of the Wasatch Front, the Logan PM_{2.5} nonattainment area located in Cache County, has similar topography as the Wasatch Front. The Cache Valley is approximately 4,500 feet above sea level and is almost

entirely surrounded with steep mountains reaching over 9,000 feet above sea level, forming a bowl around the valley. During the winter, sub-freezing temperatures, snow-covered ground, and stagnant high-pressure systems result in dense fog formation and temperature inversions over the valley, trapping pollution near the valley floor. The Logan nonattainment area has received national attention for having some of the worst air quality in the country during the inversion season and experiences approximately 65,564,200 vehicle miles traveled annually by heavy-duty diesel vehicles¹.

While Utah's meteorology and unique natural characteristics are important factors in the buildup of fine particulate in Utah's nonattainment areas, the majority of the PM_{2.5} that builds up during these pollution episodes is formed through complex chemical reactions involving volatile organic compounds (VOCs) and NO_x. Those same VOCs and NO_x also contribute to the formation of ozone, which is a summertime issue along the Wasatch Front when sunlight causes chemical reactions to occur between VOCs and NO_x to produce ozone.

On April 30, 2018, EPA Administrator Scott Pruitt signed a final notice designating the Northern and Southern Wasatch Front and the Uinta Basin (Duchesne and Uinta counties) as marginal nonattainment areas for the 2015 8-hour ozone standard.

Medium- and heavy-duty diesel vehicles are the largest mobile source contributors of NO_x emissions in the nonattainment areas, representing half of the on-road mobile sources category. Falling into these vehicle engine categories, diesel school buses remain a priority to DAQ for diesel emissions reductions. Recent developments in school bus technology offer new all-electric options for school districts to consider. DAQ will target school buses with routes in the nonattainment areas, specifically those considered to be in or near Environmental Justice Areas, and offer financial incentives for districts to test the new school bus technology. It is anticipated that districts across the state will look to these projects when considering new school bus options.

VEHICLES AND TECHNOLOGIES: *A description of the eligibility, number, types and typical use, and ownership of vehicles, engines, and/or equipment targeted for emission reductions. Eligibility of vehicles is defined in Section VIII.B of the Program Guide. A description of all verified and/or certified technologies to be used or funded by the applicant. Eligibility of technologies is defined in Section VIII.C of the Program Guide.*

UDEQ anticipates funding up to 45% of the cost for replacing approximately eight diesel school buses with new all-electric school buses (four buses for FY17 and four for FY18). The school buses to be selected will be owned by the respective school districts or private businesses contracted for transportation by the school districts. The school buses are used to transport pre-school, elementary, junior high, high school, and special needs students to and from school and other activities.

Diesel school buses with engine model years 1995 to 2006 that are not scheduled for replacement before October, 2021, will be selected to participate with priority given to buses that operate in the 24-hour PM_{2.5} non-attainment areas. School buses will be selected with the condition that they will be permanently disabled, that the school districts are able to meet the mandatory match requirements, and that the replacement activities will occur within the required timeline, using new all-electric school bus technology.

¹ UDEQ 7-County Heavy-Duty Vehicle Inventory (2016 Annual)

ROLES AND RESPONSIBILITIES: *A discussion of the roles and responsibilities of the state or territory and any other project partners, contractors, or subgrantees. State and territories should indicate whether their Program funds will support grant, rebate, and/or loans, and provide a detailed description of their disbursement methodology.*

DAQ will assign two full-time employees to coordinate, monitor, and oversee these projects to ensure successful use of grant funds throughout the project period, report on progress, and promote its success. DAQ staff will establish criteria and requirements for participation, determine project eligibility, monitor and report on progress, oversee contracts, budget, and promote program accomplishments.

Participating school districts will be responsible for meeting the grant requirements, working with the school bus manufacturers, making the all-electric school bus purchases following state procurement rules, providing the mandatory cost-share, and submitting required grant documentation to DAQ.

DAQ will coordinate with the local utility to determine other incentives that may be leveraged for all-electric projects, such as infrastructure costs. Utah legislators passed the Sustainable Transportation and Energy Plan (STEP) to support the expansion of electric vehicle (EV) technology. This provides \$2 million for five years for EV infrastructure, air quality, and other initiatives, and an opportunity to partner with another entity to leverage project costs.

FY17 and FY18 State Clean Diesel Grant funds will support grants to be dispersed as reimbursements to the school districts for allowable costs of the new all-electric school buses, upon demonstration by the school districts that grant requirements have been met.

TIMELINE AND MILESTONES: *A detailed timeline for the project including milestones for specific tasks, such as subgrant or rebate program development, solicitation of project partners, making subawards, program/project implementation, procurement and installation of equipment, monitoring and oversight of projects, and reporting.*

FY2017 Project Timeline:

- October 2018: Announce project award on Utah Clean Diesel Program website and release grant award information to the media.
- October 2018: The DAQ begins working with school districts, the local utility, and all-electric school bus manufacturers to identify and coordinate school bus replacement projects.
- December 2018: School districts submit diesel school buses to DAQ for evaluation to participate.
- January 2019: DAQ develops grant documents. Quarterly reports submitted to EPA.
- February 2019: Grant contracts finalized. School districts submit bids to DAQ for new all-electric school buses
- March 2019: Upon approval of new school bus bids from DAQ, school districts place order for new all-electric school buses.
- April 2019: Quarterly reports submitted to EPA.
- July-August 2019: New all-electric school buses placed into service, old diesel school buses scrapped.
- July 2018: Quarterly reports submitted to EPA.
- August-September 2019: School districts submit required documentation to DAQ for grant reimbursement of new school buses.

- September, 2019: The DAQ announces completion of school bus replacement projects to media sources. Final drawdowns occur.
- December, 2019: Final report submitted to EPA.

DERA PROGRAMMATIC PRIORITIES: *A discussion of how, in providing grants, rebates, and loans under the Program, the state or territory will ensure that projects selected for funding supports the programmatic priorities as defined in Section VIII.D of the Program Guide.*

DAQ’s primary goal is to select diesel school buses that operate predominately in Utah’s PM_{2.5} nonattainment areas: Box Elder, Cache, Davis, Salt Lake, Tooele, and Utah counties and replace them with zero tailpipe emissions school buses. School districts with diesel school buses that operate in Salt Lake County will receive higher priority as it is also considered to be an area having toxic air pollutant concerns, according to the National Air Toxics Assessment.

School bus depots in these areas will be directly impacted by the new fueling source for the all-electric school buses. EV charging stations will be installed in these areas where school buses are parked for long periods of time, eliminating emissions from diesel engines.

EPA’S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS: *A description of the how the projects selected for funding support the Agency’s Strategic Plan, as well as a description of the environmental outputs and outcomes to be achieved under the Program, as defined in Section VIII.E of the Program Guide. To estimate some of the anticipated outcomes of the award (e.g. emissions reductions), EPA encourages states and territories to use the Diesel Emissions Quantifier found at: www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq.*

This proposal supports progress toward EPA's 2018-2022 Strategic Plan Goal 1, “Core Mission: Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.” Objective 1.1 “Improve Air Quality...work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.”

Reducing emissions from diesel engines in areas of the state that exceed the NAAQS is the primary goal for these projects. Targeting diesel engines provides an opportunity for implementing voluntary emissions reductions from a source that is not regulated at the state level. These projects will target the most populous areas of the state and achieve measureable results with the following anticipated outputs and outcomes:

Activities:	Outputs:	Outcomes:								
		Reductions Per Year		Lifetime Emissions Reductions						
		Hours of Idling Reduced/Year	Approximate Diesel Equivalent Gallons of Fuel Conserved/YR	NOx (short tons)	PM2.5 (short tons)	HC (short tons)	CO (short tons)	CO2 (short tons)	Approximate Diesel Equivalent Gallons of Fuel Conserved	Hours of Idling Reduced
Replace 4 Diesel School Buses	4 diesel school buses, engine model year average 2002, permanently disabled and replaced with electric school buses	268	7,504	1.336	0.094	0.264	0.628	337.700	30,016	1,072
	Totals	268	7,504	1	0	0	1	338	30,016	1,072

Other Outputs:

- Number of grant agreements/contracts signed by participating fleet owners/operators
- Number of vehicle's evaluated and approved by UDAQ for participation
- Number of new vehicle purchases
- Number of vehicles scrapped
- Amount of reimbursements made to fleet owners/operators

Other outputs will be measured using a form to track progress on program deliverables. The deliverables include the number of vehicles, executed grant contracts, participant submittal of vehicle information, DAQ approval of vehicle eligibility, submittal of bids for new vehicle purchases, DAQ approval of bids, submittal of scrappage documentation, DAQ approval of scrappage documentation, submittal of new vehicle purchase documents (invoices, proof of payment to verify cost-share commitment was met. Using the Google Drive process managed through one email account, staff is able to more efficiently and effectively track communications and data in one place.

Other Outcomes:

- Community outreach and participation through monthly partner meetings conducted by the Utah Clean Air Partnership – UCAIR was formed as a government program, initiated by Utah Governor Gary Herbert, to bring business, industry, education, and government partners together to improve Utah's air quality statewide. UCAIR partners meet monthly to share efforts and identify ways of working with each other to design projects that educate the community and have measureable outcomes. This network continues to focus on education, outreach, and strategies for improving air quality through sharing experiences, knowledge, and best practices. The Utah Clean Diesel Programs are exemplified in these efforts.
- Promotion of project activities through websites, social media, annual reports, press releases, and other marketing sources. Throughout the project period, DAQ will contact local media outlets and utilize marketing sources such as the Utah Department of Environmental Quality website, social media, public outreach activities and promotional projects to endorse the project's outcomes. Vehicle purchases through this program will receive a program decal to display on the vehicle that includes the program's website that will direct the public to more detailed information about Utah Clean Diesel Program information and related activities.
- School buses to be targeted will operate in low-income areas transporting children, some with special needs, who are vulnerable to adverse health outcomes due to pollution from diesel engines. Health benefits for this population group will have long-term effects.
- Grant documents generated with participating school districts to provide an outline of the grant requirements.
- Partnerships with vehicle manufacturers, school districts, the local utility, and the state.
- Quarterly and final reporting to EPA will occur and will provide an account for measurable performance of the activities represented in this proposal throughout the project period in an effort to ensure the environmental objectives are being met within the appropriate timeline and within budget. This will document any setbacks that may occur. The final report will summarize environmental achievements, cost, and any barriers that may have taken place throughout the grant period.

- Demonstration of new vehicle technology with the intent of widespread adoption across the state.
- Stimulate emerging school bus technologies with zero tailpipe emissions.
- The long-term outcomes of this project are to reduce pollutants as an on-going effort for Utah to comply with unmet NAAQS in certain areas to protect public health. The emissions reductions that will result from carrying out these projects will provide long-term public health benefits in specific locations.
- Contractual obligations will ensure grant requirements and associated outputs and outcomes are met.

SUSTAINABILITY OF THE PROGRAM: *A description of the state's or territory's plan for sustaining the project beyond the assistance agreement period. Additionally, describe the state's or territory's plan for publicizing and promoting the benefits of the activities within the state or territory.*

DAQ has been participating in diesel emission reduction programs and has useful experience identifying, implementing, and overseeing successful projects to completion. DAQ values opportunities to expand projects to their full potential by creating methods to match EPA's funding in order to maximize sustainability. We anticipate that the successes of our past clean diesel projects will increase the potential for state clean diesel funds to continue being allocated or awarded to us by EPA for expansion in the future. DAQ will use our experience and past successes to compete for future funding opportunities to provide financial resources for Utah diesel fleets. The following efforts will help sustain the project beyond this assistance agreement:

- DAQ will promote diesel emissions reduction activities by providing a public notification that lists project information within 60 days of a grant, including clean diesel information on websites, social media, promotional projects, and public outreach events. DAQ will also encourage the vendors to provide technical training to the participants on the proper maintenance and use of the new equipment purchases in order to ensure the maximum sustainability of the project.
- The distribution of information related to the technology and benefits achieved through these projects will result in an increased public awareness of the value in reducing diesel emissions.
- The targeted school buses will operate in low-income areas transporting children, some with special needs, who are vulnerable to adverse health outcomes due to pollution from diesel engines. Health benefits for this population group will have long-term effects.
- The long-term outcomes of this project are to reduce pollutants as an on-going effort for Utah to comply with unmet National Ambient Air Quality Standards in certain areas to protect public health. The emissions reductions that will result from carrying out these projects will provide long-term public health benefits in specific locations.
- The school districts have an idle-free policy and education in place to inform students at a young age to practice sustainable habits that lower emissions.
- Additional funding sources, such as Volkswagen Settlement Funds, Targeted Air Shed Grants, and state incentives, will be used to incent upgrades to heavy-duty diesel fleets.

BUDGET NARRATIVE

This section of the work plan should include a detailed itemized budget proposal (in addition to the Standard Form 424A), using the example below. Justify the expenses for each of the categories being performed within the grant/project period. Indicate which costs will be paid by the state's or territory's allocation from EPA (which would include the bonus match, if applicable) and which costs will be paid by the state's or territory's voluntary matching funds, if applicable.

*Applicants must **itemize** costs related to personnel, fringe benefits, travel, equipment, supplies, contractual costs, other direct costs, indirect costs, and total costs. If the project budget includes any cost-share, mandatory or voluntary, the budget detail portion of the work plan must include a detailed description of how the applicant will obtain the cost-share and how the cost-share funding will be used.*

Mandatory cost-share funds must be in the form of cash contributions to the Equipment Category. If EPA accepts an offer for a voluntary cost-share, applicants must meet their sharing commitment in order to receive EPA funding. If the proposed cost-share is to be provided by a third-party, a letter of commitment is encouraged. Any form of cost-share included in the budget detail must also be included on the SF-424 and SF-424A.

Applicants should use the following instructions, budget category descriptions and example table to complete the budget detail section of the work plan. Detailed sample budgets representing various mandatory cost-share versus state voluntary match scenarios are available at: www.epa.gov/cleandiesel/clean-diesel-state-allocations.

FY17 and FY18 Itemized Project Budgets

FY17 STATE CLEAN DIESEL GRANT PROGRAM BUDGET						
				EPA Funding	State Match	Mandatory Match
Personnel (All Listed are 100% FTE)	Annual Salary		% Project Time			
Environmental Planning Consultant	\$60,882		4.20%	\$2,557		
TOTAL PERSONNEL				\$2,557	\$0	\$0
Fringe Benefits						
Calculated based on Personnel amount, and includes:						
Retirement, 401k, Social Security, Medicare, Workmans Comp,						
Unemployment Insurance, Long Term Disability, Termination Additive						
TOTAL FRINGE BENEFITS	calculated at:	50%		\$1,279	\$0	\$0
Travel						
In-state site visits; travel for 1 person, based on cost reimbursement	Estimated Rate:		Number:			
Hotel	\$128.00		0	\$0		
Daily Per Diem	\$36.00		0	\$0		
Mileage	\$0.36		-	\$0		
TOTAL TRAVEL				\$0	\$0	\$0
Equipment	Cost/Unit		QTY			
				\$0	\$0	
				\$0	\$0	
TOTAL EQUIPMENT				\$0	\$0	\$0
Supplies						
TOTAL SUPPLIES						
Contractual						
	Labor rate (\$/hour):		Duration (hours per unit):			
				\$0	\$0	
				\$0	\$0	
TOTAL CONTRACTUAL				\$0	\$0	\$0
Other (includes Participant Support Costs)						
	Cost/Unit		QTY			
Diesel School Bus Replacements to All-Electric	\$382,000		2	\$343,800		\$420,200
Additional Diesel School Bus Replacements Through Voluntary Match (Special Ed)	\$306,000		2		\$275,400	\$336,600
Building & Site Rental				\$100		
Utilities				\$87		
LAN/WAN				\$51		
Phone				\$30		
Printing/Photocopy				\$30		
TOTAL OTHER			4	\$344,098	\$275,400	\$756,800
TOTAL DIRECT				\$347,934	\$275,400	\$756,800
TOTAL INDIRECT (based on OMB Circular A-87 Cognizant Agency Negotiation Agreement. Percentage taken from personnel and benefits)			12.53%	\$481		
TOTAL FUNDING				\$348,414	\$275,400	\$756,800
TOTAL PROJECT COST					1,380,614	
				Administrative Costs (personnel, benefits, travel, supplies)	\$3,836	
				% of EPA's Allocation	1%	

FY18 STATE CLEAN DIESEL GRANT PROGRAM BUDGET						
				EPA Funding	State Match	Mandatory Match
Personnel (All Listed are 100% FTE)	Annual Salary		% Project Time			
Environmental Planning Consultant	\$60,882		4.20%	\$2,557		
TOTAL PERSONNEL				\$2,557	\$0	\$0
Fringe Benefits						
Calculated based on Personnel amount, and includes:						
Retirement, 401k, Social Security, Medicare, Workmans Comp,						
Unemployment Insurance, Long Term Disability, Termination Additive						
TOTAL FRINGE BENEFITS	calculated at: 58%			\$1,483	\$0	\$0
Travel						
In-state site visits; travel for 1 person, based on cost reimbursement						
	Estimated Rate:		Number:			
Hotel	\$128.00		0	\$0		
Daily Per Diem	\$36.00		0	\$0		
Mileage	\$0.36		-	\$0		
TOTAL TRAVEL				\$0	\$0	\$0
Equipment	Cost/Unit		QTY			
				\$0	\$0	
				\$0	\$0	
TOTAL EQUIPMENT				\$0	\$0	\$0
Supplies						
TOTAL SUPPLIES						
Contractual						
	Labor rate (\$/hour):		Duration (hours per unit):			
				\$0	\$0	
				\$0	\$0	
TOTAL CONTRACTUAL				\$0	\$0	\$0
Other (includes Participant Support Costs)						
	Cost/Unit		QTY			
Diesel School Bus Replacements to All-Electric	\$453,000		2	\$407,700		\$498,300
Additional Diesel School Bus Replacements Through Voluntary Match (Special Ed)	\$306,000		2		\$275,400	\$336,600
Building & Site Rental				\$90		
Utilities				\$80		
LAN/WAN				\$40		
Phone				\$20		
Printing/Photocopy				\$20		
TOTAL OTHER			4	\$407,950	\$275,400	\$834,900
TOTAL DIRECT				\$411,990	\$275,400	\$834,900
TOTAL INDIRECT (based on OMB Circular A-87 Cognizant Agency Negotiation Agreement. Percentage taken from personnel and benefits)			12.61%	\$509		
TOTAL FUNDING				\$412,499	\$275,400	\$834,900
TOTAL PROJECT COST				1,522,799		
				Administrative Costs (personnel, benefits, travel, supplies)	\$4,040	
				% of EPA's Allocation	1%	

Matching Funds and Cost-Share Funds

States and territories must provide a detailed description of the source of funding for any voluntary match or mandatory cost-share funds included in the project budget, if applicable. Include details on when the match will be available for use. If applicable, include letters of financial support, which specifically indicate how supporting organizations will assist in the project.

See Sections V.B and X of the Program Guide for more information on the voluntary matching incentive and mandatory cost-share funds.

The mandatory match will come from the participating school districts' transportation budgets. The voluntary state match will come from the Volkswagen Settlement of \$35,177,506, which DEQ has dedicated 7% to the DERA category.

FISCAL YEAR 2019

STATE CLEAN DIESEL GRANT PROGRAM

WORK PLAN AND BUDGET NARRATIVE TEMPLATE

INSTRUCTIONS: States and territories applying for FY 2019 DERA State Clean Diesel Grant Program funding must use this template to prepare their Work Plan and Budget Narrative.

Please refer to the FY 2019 STATE CLEAN DIESEL PROGRAM INFORMATION GUIDE for full Program details, eligibility criteria and funding restrictions, and application instructions.

SUMMARY PAGE

Project Title: FY19 State Clean Diesel Grant, Utah Department of Environmental Quality

Project Manager and Contact Information

Organization Name: Utah Division of Air Quality

Project Manager: Lisa Burr

Mailing Address: P.O. Box 144820, Salt Lake City, UT 84116

Phone: 801-536-4019

Fax: 801-536-4099

Email: lburr@utah.gov

Project Budget Overview:

	FY 2019
EPA Base Allocation	\$318,621
State or Territory Voluntary Matching Funds (if applicable)	\$328,750
EPA Match Incentive (Bonus) (if applicable)	\$159,311
Mandatory Cost-Share	\$1,271,250
TOTAL Project Cost	\$3,064,182
Other Leveraged Funds	\$986,250

Project Period

October 1, 2019 – September 30, 2021

Summary Statement

The Utah Department of Environmental Quality (UDEQ), Division of Air Quality (DAQ) proposes to use FY 2019 State Clean Diesel Program funds for Class 5-8 diesel vehicle replacements and nonroad diesel equipment replacements. Priority will be given to vehicles/equipment that operate in the Logan, Provo, and Salt Lake, UT, PM_{2.5} non-attainment areas and the Northern and Southern Wasatch Front ozone nonattainment areas.

The webpage URL for Utah Clean Diesel Projects is: cleandiesel.utah.gov.

[Please delete all text that is bracketed and in italics.]

SCOPE OF WORK

STATE/TERRITORY GOALS AND PRIORITIES: [*A description of the air quality within the state or territory, the quantity of air pollution produced by the diesel fleet in the state or territory, and the primary sectors (e.g. highway, marine vessels, construction equipment) that make up the state's or territory's diesel fleet (both public and private).*]

DAQ is proposing to target PM_{2.5} (particulate matter), NO_x (nitrogen oxides), and VOC (volatile organic compounds) emissions by replacing eligible medium- and heavy-duty diesel vehicles and nonroad diesel equipment with current model year vehicles/equipment. Priority will be given to vehicles/equipment that operate in the Logan, Provo, and/or Salt Lake, UT, 24-hour particulate matter (PM)_{2.5} nonattainment areas (NAA) and the Northern and Southern Wasatch Front ozone nonattainment areas in an effort to comply with the National Ambient Air Quality Standards (NAAQS). The counties included in these designations are: Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber.

These areas experience exceedances of the 24-hour PM_{2.5} standard during temperature inversions in the winter months. The Wasatch Mountains, Oquirrh Mountains, and Traverse Mountains create a bowl that surrounds lowland valleys where Utah's population is concentrated. This unique topography blocks horizontal air movement, causing air masses to stagnate in population centers where vehicles are abundant. During the cold winter months, temperature inversions develop where a warmer air mass sits on top of a colder air mass. Very little vertical air exchange happens during an inversion and the warm air acts as a lid on top of a bowl, trapping air and pollution. Primary and secondary PM_{2.5} build and cannot dissipate until a strong weather system moves through. The air stagnation and pollution buildup results in exceedances of the 24-hour PM_{2.5} NAAQS. Consequently, the EPA has classified the Provo and Salt Lake areas as serious nonattainment areas for 24-hour PM_{2.5} and the Logan area as a moderate nonattainment area for PM_{2.5}.

More than 80% of the state's population live and work in the Salt Lake and Provo PM_{2.5} nonattainment portions of the Wasatch Front where construction projects and major transportation systems are most prevalent. Because the Wasatch Front is only approximately 18 miles wide, most of the land within this area has been developed and has experienced rapid growth from Utah's aggressive economic development trends. The Wasatch Front is a central point for national freight distribution and is home to thousands of warehouses, distribution centers, and terminals for the country's largest trucking companies, carriers, and suppliers, creating a high presence of diesel freight traffic, over 1,624,223,883 vehicle miles traveled, that contribute to over 18,304 tons of pollution annually¹.

North of the Wasatch Front, the Logan PM_{2.5} nonattainment area located in Cache County has similar topography to the Wasatch Front. The Cache Valley is approximately 4,500 feet above sea level and is almost entirely surrounded with steep mountains reaching over 9,000 feet above

¹ UDEQ 7-County, Heavy-Duty Diesel Vehicle Inventory (2017 Annual)

[Please delete all text that is bracketed and in italics.]

sea level, forming a bowl around the valley. During the winter, sub-freezing temperatures, snow-covered ground, and stagnant high-pressure systems result in dense fog formation and temperature inversions over the valley, trapping pollution near the valley floor. The Logan nonattainment area has received national attention for having some of the worst air quality in the country during the inversion season and experiences approximately 41,847,940 vehicle miles traveled annually by heavy-duty diesel vehicles².

While Utah's meteorology and unique natural characteristics are important factors in the buildup of fine particulate in its nonattainment areas, the majority of the PM_{2.5} that builds up during these pollution episodes is formed through complex chemical reactions involving volatile organic compounds (VOCs) and NOx. Those same VOCs and NOx also contribute to the formation of ozone, which is a summertime issue along the Wasatch Front when sunlight causes chemical reactions to occur between them to produce ozone.

On April 30, 2018, EPA Administrator Scott Pruitt signed a final notice designating the Northern and Southern Wasatch Front and the Uinta Basin (Duchesne and Uinta counties) as marginal nonattainment areas for the 2015 8-hour ozone standard.

Medium- and heavy-duty diesel vehicles are the largest mobile source contributors of NOx emissions in the nonattainment areas, representing half of the on-road mobile sources category. Falling into these vehicle engine categories, medium- and heavy-duty diesel vehicles and nonroad diesel equipment remain a priority to DAQ for diesel emissions reductions. DAQ will target vehicles/equipment that operate in the nonattainment areas, specifically those considered to be in or near Environmental Justice Areas.

VEHICLES AND TECHNOLOGIES: *[A description of the eligibility, number, types and typical use, and ownership of vehicles, engines, and/or equipment targeted for emission reductions. Eligibility of vehicles is defined in Section VIII.B of the Program Guide. A description of all verified and/or certified technologies to be used or funded by the applicant. Eligibility of technologies is defined in Section VIII.C of the Program Guide.]*

Eligibility of participating vehicles and equipment will be determined by their engine model year and tier levels, gross vehicle weight ratings, horsepower, status of operation, level of use, remaining useful life, location of use, fleet owners' retirement schedules and ability to meet the mandatory match requirements, and program timelines. Eligibility will also be based on the condition that the replaced engine will be permanently disabled.

DAQ is aiming to replace five Class 8 short- and long-haul trucks, engine model years 1996-2009, and six Class 5-7 short-haul trucks, engine model years 1996-2009, owned by various local fleet owners/operators, such as independent service providers for mail/package deliveries; retailers for residential and commercial plumbing, heating and cooling, irrigation and hydronics,

² UDEQ 7-County, Heavy-Duty Diesel Vehicle Inventory (2017 Annual)

and auto parts; and other local suppliers and delivery services. The target vehicles run daily local routes from central warehousing and distribution facilities and rail yards to various retail, business, and residential locations. Public fleet vehicles/equipment used for local and state government operations such as maintenance and construction projects, will also be targeted.

In addition, three 51- 300 horsepower nonroad diesel equipment units from unregulated to Tier 3 will be replaced with Tier 4 equipment, and two 301 and higher horsepower nonroad diesel equipment units from Tier 0 to Tier 3 will be replaced with Tier 4 equipment. The target nonroad equipment types and typical use will include agriculture, construction, and cargo handling owned by private and public fleet owner/operators.

When evaluating vehicles/equipment for eligibility, DAQ will prioritize projects that have a minimum of three years remaining in the useful life of the vehicle/equipment at the time of replacement or that aren't scheduled to be replaced until 2023 or later.

According to the California Air Resources Board (CARB) Executive Orders for current on-highway engine model years, new certified engine technologies include the following emissions control systems: direct diesel injection (DDI), turbo charger (TC), charge air cooler (CAC), engine control module (ECM), exhaust gas recirculation (EGR), oxidizing catalysts (OC), periodic trap oxidizer (PTOX), selective catalytic reduction - urea (SCR-U), ammonia oxidation catalyst (AMOX), and on-board diagnostics (OBD). Also, all 2007 and newer heavy-duty, diesel engines are required to have closed crankcase ventilation systems or route the crankcase emissions to the exhaust up-stream of exhaust aftertreatment systems. Current model year engines meet the following emissions standards: 0.14 grams/break hp-hour (g/bhp-hr) for non-methane/hydrocarbon (NMHC), 0.20 g/bhp-hr for oxides of nitrogen (NO_x), 15.5 g/bhp-hr for carbon monoxide (CO), and 0.01 g/bhp-hr for PM.

CARB's engine certifications for current off-road engine models show the manufacturers have included the following emissions controls for engine sizes ranging from ~75 hp to ~500 hp: electronic direct injection (EDI), diesel oxidation catalyst (DOC), TC, CAC, ECM, OC, EGR, and SCR-U, and AMOX.

ROLES AND RESPONSIBILITIES: *[A discussion of the roles and responsibilities of the state or territory and any other project partners, contractors, or subgrantees. State and territories should indicate whether their Program funds will support grant, rebate, and/or loans, and provide a detailed description of their disbursement methodology.]*

DAQ will assign two full-time employees to coordinate, monitor, and oversee these projects to ensure successful use of grant funds throughout the project period, report on progress, and promote its success. DAQ staff will establish criteria and requirements for participation, determine project eligibility, monitor and report on progress, oversee contracts and budget, and promote program accomplishments.

Through contractual obligation, participating fleet owners/operators will be responsible for demonstrating that their vehicle(s)/equipment are eligible to participate in the grant, purchasing

the new vehicles/equipment, providing the mandatory cost-share, meeting program requirements, and submitting required documentation to DAQ.

FY19 State Clean Diesel Grant program funds will support grants to be dispersed as reimbursements to the fleet owners for allowable costs of the new vehicle/equipment purchases, upon demonstration by the fleet owners that grant requirements have been met. DAQ will consider the reimbursements as participant support costs.

TIMELINE AND MILESTONES: *[A detailed timeline for the project including milestones for specific tasks, such as subgrant or rebate program development, solicitation of project partners, making subawards, program/project implementation, procurement and installation of equipment, monitoring and oversight of projects, and reporting.]*

FY2019 Project Timeline:

- October 2019: Announce project award on Utah Clean Diesel Program website and introduce program to fleet owners/operators.
- November – December 2019: DAQ opens a two-month application period for fleet owners/operators to submit potential vehicle/equipment replacement projects for evaluation to participate.
- January 2020: DAQ submits quarterly reports to EPA.
- January-February 2020: DAQ evaluates potential projects.
- March 2020: DAQ identifies successful projects.
- March - April 2020: DAQ develops award letters, grant agreements, and terms and conditions documents for successful participants.
- April 2020: DAQ submits quarterly reports to EPA.
- May 2020: DAQ meets with participating fleet owners/operators to review grant processes and requirements.
- June 2020: DAQ submits quarterly reports to EPA. Grant agreements are finalized.
- June - July 2020: Participating fleet owners/operators submit vehicle/equipment photos and documentation to DAQ for demonstration of eligibility. DAQ submits quarterly reports to EPA.
- July - August 2020: DAQ reviews vehicle/equipment photos and documentation to verify eligibility and gives approval to fleet owners/operators to obtain a minimum of two bids for new vehicle/equipment purchases.
- August – September 2020: Participating fleet owners/operators submit two bids for new vehicle/equipment purchases to DAQ for review.
- September – October 2020: DAQ reviews bids for new vehicle/equipment purchases and provides approval to fleet owners/operators to order new vehicles/equipment.
- October 2020: DAQ submits quarterly reports to EPA.
- January 2021: DAQ submits quarterly reports to EPA.
- February – April 2021: Fleet owners/operators place into service new vehicles/equipment and submit invoices, proof of payment, and photos of new vehicle/equipment engine plates to DAQ.

- April 2021: DAQ submits quarterly reports to EPA.
- March – June 2021: Participating fleet owners/operators remove from service and permanently disable original vehicles/equipment and submit scrappage documentation to DAQ for approval. DAQ submits quarterly reports to EPA.
- May – July 2021: DAQ reviews and approves scrappage documentation and other grant documentation submittals and issues reimbursements to fleet owners/operators.
- August – September 2021: DAQ prepares final evaluations of outputs and outcomes.
- December 2021: DAQ submits final report to EPA.

DERA PROGRAMMATIC PRIORITIES: *[A discussion of how, in providing grants, rebates, and loans under the Program, the state or territory will ensure that projects selected for funding supports the programmatic priorities as defined in Section VIII.D of the Program Guide.]*

1) Designated Nonattainment Areas:

DAQ will give priority to vehicles/equipment that operate predominately (a minimum of 50%) in Utah’s PM_{2.5} and ozone nonattainment areas: Box Elder, Cache, Davis, Salt Lake, Tooele Utah, and Weber counties.

Air Toxics Assessment Areas:

According to the 2011 National Scale Air Toxics Assessment, Utah has two counties where all or part of the population is exposed to more than 2.0 µg/m³ of diesel particulate matter emissions— Salt Lake and Washington Counties. The target vehicles will be loading at distribution centers within Salt Lake County and making daily local deliveries throughout these counties.

2) Goods Movement:

As the “Crossroads of the West” for freight traffic, Utah provides a life-line to critical transportation arteries for freight distribution coast to coast and between Canada and Mexico. Interstates 15, 80, 84, and 70 and other freight routes provide connections to Utah’s central transportation network, which serves as a strategic hub for highway, rail, inter-modal, pipeline and air freight in the Western United States.

The central point of the western United States, Utah boasts access to inter-modal hubs for warehousing and distribution and is home to some of the country’s largest trucking companies, carriers, and suppliers. The Salt Lake International Airport, Union Pacific Railroad, and thousands of distribution centers and terminals create a high presence of transportation. The target vehicles/equipment utilize these distribution centers and terminals as their home-base for sorting, prioritizing, moving cargo, and loading/unloading their daily deliveries. Hundreds of delivery trucks and diesel equipment are consolidated in these locations at the same times every day, creating a heavy presence of diesel emissions.

Goods movement is only expected to grow in the coming years as population is expected to double and state leaders work to position Utah for becoming a global logistics and distribution

hub to the world. Salt Lake City, the State’s capital, will be home to an inland port, over 16,000-acres of multimodal freight distribution infrastructure that will provide strategic access to major interstates and highways, seaports, international airports, and railways.

<i>Project Location</i>		
<i>State:</i>	Utah	Utah
<i>County:</i>	Cache, Davis, Salt Lake, Utah, Weber	Cache, Davis, Salt Lake, Utah, Weber
<i>City</i>	Logan, Layton, Salt Lake, Provo, Ogden	Logan, Layton, Salt Lake, Provo, Ogden
<i>Congressional District:</i>	1, 2, 3, 4	1, 2, 3, 4
<i>Zipcode:</i>	84321, 84040, 84116, 84601, 84405	84321, 84040, 84116, 84601, 84405
<i>Type and Number of Affected Vehicles:</i>	-5 Class 8 on-highway -6 Class 5-7 on-highway	-1 Agriculture -3 Construction -1 Cargo Handling
<i>% of Time Vehicles Spend in Area::</i>	50-100%	50-100%
<i>Nonattainment Area:</i>	X	X
<i>Air Toxic Assessment Area:</i>	X	X
<i>Goods Movement:</i>	Terminals and Distribution Centers	Ports, Terminals, and Distribution Centers

EPA’S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS:

[A discussion of how the projects selected for funding support the Agency’s Strategic Plan, as well as a description of the environmental outputs and outcomes to be achieved under the Program, as defined in Section VIII.E of the Program Guide. To estimate some of the anticipated outcomes of the award (e.g. emissions reductions), EPA encourages states and territories to use the Diesel Emissions Quantifier found at: www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq.]

DAQ’s goal for this funding opportunity is to make progress toward meeting attainment of the NAAQS by reducing pollutants that contribute to the wintertime PM_{2.5} and summertime ozone

[Please delete all text that is bracketed and in italics.]

issues the state experiences. To achieve this, the following outputs and outcomes³ will be accomplished:

Activities:	Outputs:	Outcomes:						
		Approximate Diesel Equivalent Gallons of Fuel Conserved	NO _x (short tons)	PM _{2.5} (short tons)	HC (short tons)	CO (short tons)	CO ₂ (short tons)	
Replace five short-haul combination Class 8 diesel trucks	Five diesel trucks, average engine model year 2003, permanently disabled and replaced with engines that meet current EPA standards.	Annual Reductions	1,625	1,475	0.123	0.106	0.447	18,300
		Lifetime Reductions	4,875	4,426	0.368	0.319	1.340	54,800
		Lifetime Total Cost Effectiveness		\$67,787	\$814,786	\$938,999	\$223,873	\$0
		Lifetime Capital Cost Effectiveness		\$67,787	\$814,786	\$938,999	\$223,873	\$0
Replace six short-haul combination Class 5-7 diesel trucks	Six diesel trucks, average engine model year 2003, permanently disabled and replaced with engines that meet current EPA standards.	Annual Reductions	2,922	1,820	0.106	0.159	0.668	32.9
		Lifetime Reductions	8,766	5,461	0.317	0.478	2.003	98.6
		Lifetime Total Cost Effectiveness		\$28,018	\$482,450	\$320,070	\$76,393	\$1,292
		Lifetime Capital Cost Effectiveness		\$28,018	\$482,450	\$320,070	\$76,393	\$1,292
Replace three nonroad 51-300 horsepower diesel equipment	One agricultural 'other', Tier 1, 75 horsepower, average engine model year 2002, permanently disabled and replaced with equivalent equipment that meets current EPA standards	Annual Reductions	0.461	0.025	0.006	0.165	0.000	
		Lifetime Reductions	0.288	0.042	0.024	0.207	0.000	
		Lifetime Total Cost Effectiveness		\$231,806	\$1,635,646	\$2,753,781	\$321,743	\$0
		Lifetime Capital Cost Effectiveness		\$231,806	\$1,635,646	\$2,753,781	\$321,743	\$0
	One construction 'other', Tier 1, 300 horsepower, average engine model year 2002, permanently disabled and replaced with equivalent equipment that meets current EPA standards	Annual Reductions	0.672	0.042	0.011	0.268	0.0	
		Lifetime Reductions	1.382	0.076	0.019	0.495	0.0	
		Lifetime Total Cost Effectiveness		\$24,115	\$440,624	\$1,786,559	\$57,401	\$0
		Lifetime Capital Cost Effectiveness		\$24,115	\$440,624	\$1,786,559	\$57,401	\$0
	One cargo 'other material handling', Tier 1, 175 horsepower, average engine model year 2002, permanently disabled and replaced with equivalent equipment that meets the current EPA standards.	Annual Reductions	0.101	0.008	0.01	0.033	0.0	
		Lifetime Reductions	0.302	0.024	0.030	0.098	0.0	
		Lifetime Total Cost Effectiveness		\$165,370	\$2,063,610	\$1,673,528	\$510,244	\$0
		Lifetime Capital Cost Effectiveness		\$165,370	\$2,063,610	\$1,673,528	\$510,244	\$0
Replace two nonroad 301+ horsepower diesel equipment	Two construction 'other construction equip', Tier 1, 500 horsepower, average engine model year 1997, permanently disabled and replaced with equivalent equipment that meets current EPA standards.	Annual Reductions	2.210	0.117	0.036	0.852	0.0	
		Lifetime Reductions	6.628	0.351	0.107	2.557	0.0	
		Lifetime Total Cost Effectiveness		\$60,345	\$1,140,056	\$3,734,913	\$156,443	\$0
		Lifetime Capital Cost Effectiveness		\$60,345	\$1,140,056	\$3,734,913	\$156,443	\$0
Totals		Annual Reductions	4,547	6,738	0.421	0.328	2.432	51.2
		Lifetime Reductions	13,641	18,488	1.178	0.977	6.699	153.410
		Lifetime Total Cost Effectiveness		\$577,441	\$6,577,171	\$11,207,850	\$1,346,097	\$1,292
		Lifetime Capital Cost Effectiveness		\$577,441	\$6,577,171	\$11,207,850	\$1,346,097	\$1,292

Additional Outputs and Outcomes:

- Activities contribute toward demonstration of attaining the NAAQS
- The implementation of air quality policies for freight movement and state fleet vehicles as evidenced through HB 433 (<https://le.utah.gov/~2019/bills/static/HB0433.html>) and SB 3, Pre-2007 State Vehicle Replacement Plan (<https://le.utah.gov/~2019/bills/static/SB0003.html>)
- Community engagement through program implementation and sharing technical information and best practices for diesel fleet operators
- Partnerships with five to ten local dealerships and dozens of fleet owners
- Potential for 16 grant contracts/agreements with fleet owners
- Quarterly and final reporting to EPA for accounting of measurable performance throughout the project period, with summaries of environmental outcomes through the final report

³ Calculations are from EPA's Diesel Emissions Quantifier and CO₂ reductions reflect EPA's Greenhouse Gas Emissions Standards for medium and heavy-duty vehicles

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- Distribution of program accomplishments related to the environmental activities through program branding, websites, State of Environment reports, press releases, public involvement processes, and social media
- New vehicle purchases encourage the inclusion of idle-reduction technologies and SCR technology in the engine configuration that reduces the EGR and diesel particulate filter regeneration duty cycles, which can improve fuel economy 3-5%, according to Diesel Technology Forum, dieselforum.org
- Changes in driver behavior for turning off engines during idle time due to more reliable engines
- Scrappage of 16 outdated, dirty diesel engines

SUSTAINABILITY OF THE PROGRAM: *[A description of the state’s or territory’s plan for sustaining the project beyond the assistance agreement period. Additionally, describe the state’s or territory’s plan for publicizing and promoting the benefits of the activities within the state or territory.]*

In addition to promoting diesel emissions reduction activities via the Utah Clean Diesel website, DAQ incentives page, social media, promotional projects, and public outreach events, DAQ will promote and continue efforts to reduce emissions after EPA funding for this project has ended through the following 2019 approved legislation, appropriations totaling \$29,013,000 one-time funding and \$45,400 on-going funding for air quality improvements, and other DAQ programs and activities. These emissions reduction initiatives are a result of Governor Herbert’s 2017 goal to reduce emissions 25% by 2026:

- House Bill (HB) 148, Vehicle Idling Revisions – Reduces restrictions for enforcement of local anti-idling ordinances (<https://le.utah.gov/~2019/bills/static/HB0148.html>)
- HB 107, Sustainable Transportation and Energy Plan Act Amendments – amends the Sustainable Transportation Plan Act to include a large-scale natural gas utility. Includes a pilot program and provides for air quality improvements (<https://le.utah.gov/~2019/bills/static/HB0107.html>)
- HB 109, Hydrogen Fuel Production Amendments - provides \$2,200 for fiscal year (FY) 2020 and \$5,000 for FY 2021 - Modifies provisions related to Permanent Community Impact Fund and High Cost Infrastructure Development Tax Credit Act. Expands definition of “throughput infrastructure project” to include a facility that stores, produces, or distributes hydrogen as fuel in zero emission motor vehicles, for electrical generation, or for industrial use (<https://le.utah.gov/~2019/bills/static/HB0109.html>)
- HB 139, Motor Vehicle Emissions Amendments – Amends penalties for visible emissions (“rolling coal”), prohibits distraction or endangerment of vulnerable highway users by excessive exhaust, and adds reporting requirements (<https://le.utah.gov/~2019/bills/static/HB0139.html>)
- Senate Bill (SB) 2, Electric Vehicle Charging Stations at State Sites: Provides \$2,000,000 one-time funding for electric vehicle charging stations at state sites (<https://le.utah.gov/~2019/bills/static/SB0002.html>)

- SB 2, Electric Vehicle Charging Equipment: Provides \$4,990,000 one-time funding of incentives for businesses and government entities to install electric vehicle charging equipment (<https://le.utah.gov/~2019/bills/static/SB0002.html>)
- SB 3, Pre-2007 State Vehicle Replacement Plan: Provides \$4,000,000 one-time funding for replacing 238 pre-2007 engine model year state diesel vehicles (<https://le.utah.gov/~2019/bills/static/SB0003.html>)
- SB 2, Weatherization: Provides \$1,000,000 one-time funding for weatherization assistance that reduces energy consumption and NO_x emissions from home heating appliances (<https://le.utah.gov/~2019/bills/static/SB0002.html>)
- HB 218, Construction Code Modifications – Adopts the full commercial energy code (<https://le.utah.gov/~2019/bills/static/HB0218.html>)
- HB 353, Reduction of Single Occupancy Vehicle Trips Pilot Program Amendments – Provides \$500,000 one-time funding for FY 2020 for free-fare transit on select poor air quality days (<https://le.utah.gov/~2019/bills/static/HB0353.html>)
- House Concurrent Resolution (HCR) R 9, Concurrent Resolution Commending Jordan School District on Its Fleet of Natural Gas School Buses – Commends Jordan School District for its contribution to improved public health and fiscal responsibility by acquiring school buses that operate on compressed natural gas (<https://le.utah.gov/~2019/bills/static/HCR009.html>)
- HCR 11, Concurrent Resolution Encouraging the Purchase of Tier 3 Gasoline – Encourages gasoline retailers to purchase gasoline supply from the refineries who have committed to manufacturing Tier 3 compliant gasoline (<https://le.utah.gov/~2019/bills/static/HCR011.html>)
- HCR 3, Concurrent Resolution Urging the EPA to Update Switcher Locomotive Emission Standards – Urges EPA to update switcher locomotive emission standards to reduce harmful emissions (<https://le.utah.gov/~2019/bills/static/HCR003.html>)
- SB 21, Sunset Reauthorization, Air Conservation Act – Extends the repeal date of the Air Conservation Act (<https://le.utah.gov/~2019/bills/static/SB0021.html>)
- HB 433, Inland Port Amendments – Encourages all Class 5-8 designated truck traffic entering the authority jurisdictional land to meet the heavy-duty highway compression-ignition diesel engine and urban bus exhaust emission standards for year 2007 and later (<https://le.utah.gov/~2019/bills/static/HB0433.html>)
- Additionally, the DAQ Compliance Branch has made a new policy to, whenever allowed through Section 19-1-603(3) of the Utah Code, put 80% of settlement agreements into an Environmental Mitigation Response Fund (EMRF) for air quality emissions reductions programs. The most recent example of this comes from a final settlement agreement in February that resulted in a \$56,000 payment into the fund. The DAQ Compliance Branch is in several other settlement negotiations that will likely lead to additional funds for the EMRF.
- Updated 2017 statewide emission inventory, including mobile sources, to be released in the summer of 2019 will be found at: <https://deq.utah.gov/legacy/programs/air-quality/emissions-inventories/inventories/index.htm>

- SB 3, Mobile Monitoring Data Collection: Provides \$50,000 one-time funding for air quality monitors on TRAX lines (<https://le.utah.gov/~2019/bills/static/SB0003.html>)
- SB 144, Environmental Quality Monitoring Amendments – Provides \$517,800 for FY 2020 and \$40,000 for FY 2021 for the UDEQ to create a baseline for monitoring air and water pollution from the Inland Port (<https://le.utah.gov/~2019/bills/static/SB0144.html>)
- The Utah legislature appropriated \$500,000 per year ongoing for research to investigate the specific air quality problems that Utah faces. The research topics will include improving our understanding of atmospheric chemistry for PM_{2.5} and ozone, improving Utah’s emissions inventories, improving the understanding of regional pollutant transport, and the intersection of air quality regulations and health consequences.
- A rule was recently promulgated (R307-505) that requires oil and gas sources in the state to register with the DAQ. Required registration will improve the oil and gas emissions inventory and compliance assessments.
- Reclassification of the Salt Lake PM_{2.5} nonattainment areas from Moderate to Serious, resulting in more stringent requirements for the State Implementation Plan (SIP). The Salt Lake Serious SIP was completed and submitted to EPA in December of 2018 and included updates to emissions inventories, including mobile sources, a mobile vehicle emissions budget, and a base year of 2016 and a 2019 attainment year. The plan is a documented commitment that demonstrates the DAQ’s efforts to reduce emissions in order to attain the National Ambient Air Quality Standards. For more information, visit: <https://deq.utah.gov/legacy/pollutants/p/particulate-matter/pm25/serious-area-state-implementation-plans/index.htm>
- Public involvement for the development of the Serious Area SIP included input from environmental advocates, industry, local-government officials, and the general public. This input helped DAQ create a SIP that protects public health and allows economic growth.
- The Division holds monthly meetings with environmental advocates to discuss the Serious Area SIP development and other air quality planning issues. For more information, visit: <https://deq.utah.gov/legacy/pollutants/p/particulate-matter/pm25/serious-area-state-implementation-plans/public-participation.htm>
- DAQ wrote and is implementing approximately 30 new area source rules as part of the PM_{2.5} SIP. The new rules address a broad range of sources, including the printing and coating industries, solid fuel burning, and consumer products high in VOCs. A significant amount of public outreach is necessary for the efficacy of these rules.
- DAQ has begun developing PM_{2.5} Maintenance Plans for its PM_{2.5} NAAs. These plans will demonstrate how DAQ will ensure the areas will maintain attainment of the NAAQS through 2035. DAQ expects to submit this plan to the EPA as soon as December 2019.
- SB 2 & 3, State Teleworking: Provides \$6,253,000 one-time funding for state employee teleworking expenses with opportunities for more rural Utah employment (<https://le.utah.gov/~2019/bills/static/SB0002.html>, <https://le.utah.gov/~2019/bills/static/SB0003.html>)
- SB 2, Air Quality Messaging Campaigns: Provides \$500,000 one-time funding for funds expanding year-round air quality messaging campaigns and includes new targeted areas (<https://le.utah.gov/~2019/bills/static/SB0002.html>)

- SB 2, Air Quality and Climate Research Study: Provides \$200,000 one-time funding for a public-private partnership to prepare an air quality/changing climate roadmap for legislative consideration in the next general session (<https://le.utah.gov/~2019/bills/static/SB0002.html>)
- HB 357, Voluntary Wood Burning Conversion Program – Provides \$9,000,000 one-time funding to incentivize homeowners to replace wood stoves and fireplaces with natural gas appliances (<https://le.utah.gov/~2019/bills/static/HB0357.html>)
- HB 411, Community Renewable Energy Act – Provides an innovative process for communities seeking a net 100% renewable energy, including PSC rule-making authority, options for customer participation, procedures concerning rates, and renewable energy resource acquisition (<https://le.utah.gov/~2019/bills/static/HB0411.html>)
- HCR 2, Concurrent Resolution Supporting Rural Development of Wind, Solar, Hydrogen, Hydroelectric, and Geothermal Energy - Promotes development of renewable energy in rural Utah (<https://le.utah.gov/~2019/bills/static/HCR002.html>)
- HCR 5, Concurrent Resolution Urging Policies that Reduce Damage from Wildfires – Urges federal government to pursue policies that allow for easier reduction of excess forest fuel loads to prevent fires. An increase in wildfires in 2018 had a significant negative effect on air quality (<https://le.utah.gov/~2019/bills/static/HCR005.html>)
- Through the Targeted Air Shed Grant Program, DAQ has been awarded \$9,600,000 to DAQ for replacing residential wood-burning stoves and fireplaces with cleaner, natural gas inserts over the remaining four years of the program.
- Through the Targeted Air Shed Grant Program, \$3.2 million has been awarded to DAQ for replacing Class 5-8 medium-and heavy-duty diesel vehicles in the Logan, UT, 24-Hour PM_{2.5} Nonattainment Area over the remaining four years of the program.
- Through the Targeted Air Shed Grant Program, approximately \$5,000,000 has been awarded to DAQ for replacing diesel school buses and implementing a vehicle repair and replacement program in the Logan, UT, 24-Hour PM_{2.5} Nonattainment Area. The program has three years remaining.
- The Utah Legislature passed H.B 237, which creates a Clean Air Fund into which income tax payers can voluntarily donate money. The DAQ will administer these funds by providing grants to fund activities to improve air quality or by enhancing programs designed to educate the public about the importance of air quality.
- Through the VW Settlement, DAQ will implement NOx reduction projects by replacing government-owned Class 4-8 local diesel delivery trucks, shuttle buses, transit buses, and school buses and purchasing and installing electric vehicle supply equipment for government facilities.
- Through a GM ignition switch settlement, DAQ has secured five-years of funding to implement yard equipment exchanges that reduce emissions from snowblowers for the PM_{2.5} winter inversion season and lawn mowers and trimmers for the summer ozone season.

BUDGET NARRATIVE

FY19 STATE CLEAN DIESEL GRANT PROGRAM BUDGET							
				Voluntary Match			
				EPA Allocation	Mandatory Cost-Share	VW Mitigation Trust Funds	Other Funds
Personnel (All Listed are 100% FTE)		Annual Salary		8.5% of Annual FTE for Two Years			
Environmental Planning Consultant		\$64,896		\$11,032			
Environmental Planning Consultant		\$57,616		\$9,795			
Financial Analyst II		\$46,340		\$7,878			
TOTAL PERSONNEL				\$28,705	\$0	\$0	\$0
Fringe Benefits							
Calculated based on Personnel amount, and includes:							
Retirement, 401k, Social Security, Medicare, Workmans Comp,							
Unemployment Insurance, Long Term Disability, Termination Additive							
TOTAL FRINGE BENEFITS		calculated at: 58%		\$16,649	\$0	\$0	\$0
Travel							
In-state site visits; travel for 1 person, based on cost reimbursement							
		Estimated Rate:	Number:				
Hotel			0	\$0			
Daily Per Diem			0	\$0			
Mileage			-	\$0			
TOTAL TRAVEL				\$0	\$0	\$0	\$0
Equipment							
		Cost/Unit	QTY				
				\$0		\$0	
				\$0		\$0	
TOTAL EQUIPMENT				\$0	\$0	\$0	\$0
Supplies							
TOTAL SUPPLIES							
Contractual							
		Labor rate (\$/hour):	Duration (hours per unit):				
				\$0		\$0	
				\$0		\$0	
TOTAL CONTRACTUAL				\$0	\$0	\$0	\$0
Other (includes Participant Support Costs)							
		Cost/Unit	Quantity Funded by EPA Allocation	Quantity Funded by VW Mitigation Trust Funds			
Class 8 Diesel Vehicle Replacements		\$180,000	3	2	\$135,000	\$405,000	\$90,000
Class 5-7 Diesel Vehicle Replacements		\$85,000	3	3	\$63,750	\$191,250	\$63,750
Nonroad Equipment Replacements, 51-300 Horsepower		\$200,000	2	1	\$100,000	\$300,000	\$50,000
Nonroad Equipment Replacements, 301+ HP Horsepower		\$500,000	1	1	\$125,000	\$375,000	\$125,000
Building & Site Rental					\$1,500		
Utilities					\$750		
LAN/WAN					\$359		
Phone					\$250		
Printing/Photocopy					\$250		
TOTAL OTHER			9	7	\$426,859	\$1,271,250	\$328,750
		Vehicle/Equipment Quantity Total	16				
TOTAL DIRECT					\$472,213	\$1,271,250	\$328,750
TOTAL INDIRECT (based on OMB Circular A-87 Cognizant Agency Negotiation Agreement. Percentage taken from personnel and benefits)				12.61%	\$5,719		
TOTAL FUNDING					\$477,932	\$1,271,250	\$328,750
TOTAL PROJECT COST					\$3,064,182		
				Administrative Costs (personnel, benefits, travel, supplies)		\$45,354	
				% of EPA's Allocation		9%	

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Matching Funds and Cost-Share Funds

States and territories must provide a detailed description of the source of funding for any voluntary match or mandatory cost-share funds included in the project budget, if applicable. Include details on when the match will be available for use. If applicable, include letters of financial support, which specifically indicate how supporting organizations will assist in the project.

See Sections V.D and X of the Program Guide for more information on the voluntary matching incentive and mandatory cost-share funds.

The mandatory match and other leveraged funds will come from the participating fleet owners cost-sharing 75% of the cost for new vehicles/equipment purchases. Upon verifying eligibility to participate, fleet owners will be contractually obligated to the 75% cost-share upon purchase of the new vehicles/equipment. The voluntary state match will come from the Volkswagen Settlement Trust Funds of \$35,177,506, from which DEQ has dedicated seven percent to the DERA category. DEQ will be submitting a funding request to the Trustee for these funds by September, 2019.