



State of Oregon Department of Environmental Quality

APPENDIX D-4

Beneficiary Eligible Mitigation Action Certification

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary State of Oregon

Lead Agency Authorized to Act on Behalf of the Beneficiary Oregon 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, or Transit Bus (Eligible Buses)
Beneficiary's Project ID:	School Bus Replacement Cycle 2
Funding Request No.	(sequential) 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): _____ 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 Attached
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2): See Attached
Estimate of Anticipated NOx Reductions (5.2.3): See Attached
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 Attached
Describe how the Beneficiary will make documentation publicly available (5.2.7.2). See Attached
Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8). See Attached
Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9). See Attached

Beneficiary Eligible Mitigation Action Certification – Supplemental Information

Beneficiary: State of Oregon

Lead Agency: Oregon Department of Environmental Quality

In support of Funding Request No. 2

SUMMARY

Eligible Mitigation Action	<input checked="" type="checkbox"/> Appendix D-2 item (specify): <u>2</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):	
<p>The state of Oregon in Environmental Mitigation Plan posted in March 2018 identified environmental priorities for the state that mitigation actions prescribed in Appendix D-2 can address, including air quality, public health and climate change. The plan specifically outlined a protocol for selection of school buses for replacement or emission upgrades to protect the health of vulnerable populations, i.e., young children riding in school buses, and would improve air quality and mitigate climate forcers. This funding request is part of an overall program outlined in the Mitigation Plan. This request will support an estimated 12 months of activity in what is expected to be a four year program to upgrade school buses in districts across the state, primarily by scrapping older diesel buses and replacing them with lower emission vehicles.</p>	
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):	
<p>School districts will be offered the opportunity to receive funding to scrap and replace older diesel powered school buses or, using the DERA Option to install diesel particulate filters. The order in which districts are contacted is based on a draw of numbers randomly assigned to districts with buses within the median model year of the overall fleet in the state. DEQ expects to complete about one quarter of the 450 buses per year to better manage administrative costs and to minimize the replacement bubble as these buses eventually age out of the fleet 10-12 years in the future. We anticipate the school bus program will draw an estimated \$18 million from the Oregon allocation under Appendix D, approximately 26 percent of the total available.</p> <p>The focus, in these school bus replacement cycles, is on reducing impacts to young people who are especially vulnerable to health effects from diesel exhaust exposure. In children, particulate and nitrogen oxide pollution affects lung function and lung growth because of higher respiration rates and continuing lung development in young people. Affirming the connection between children's health and air pollution, the American Academy of Pediatrics adopted a policy statement recommending reductions in mobile source pollution including diesel engines.</p> <p>DEQ anticipates simultaneous reductions in NOx, particulate and air toxic emissions to be on the order of 80 to 90 percent depending upon the engine size, category and age. As noted earlier, DEQ anticipates public health and environmental benefits over the wide range of impacts associated with exposure to exhaust from legacy diesel engines. DEQ anticipates that most of the replacement vehicles and equipment will result in improved fuel economy from advances in engine technology. As a result, climate change benefits are realized from reductions in pollutants like carbon dioxide and black carbon.</p>	

Estimate of Anticipated NOx Reductions (5.2.3):

We anticipate the majority of actions will involve vehicle replacement, which will result in emission reductions in NOx, PM and other harmful pollutants. The new bus can be powered by late model diesel, propane, natural gas or electricity with the choice dependent upon the district's needs and desires. The estimated emission reductions are based on replacement with a late model diesel bus. Any alternative fuel buses that are purchased can be expected to result in additional reductions in one or more of the pollutants shown here.

Lifetime Results (short tons)	NOx	PM_{2.5}	Hydrocarbons	Carbon Monoxide	Carbon Dioxide	Black Carbon (CO₂e)
Amount reduced	36.6	3.1	4.8	17.7	481.9	5,172.9
Percent Reduced	89.6%	97.9%	91.1%	90.9%	7.5%	97.9%

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):

Oregon Department of Environmental Quality

Describe how the Beneficiary will make documentation publically available (5.2.7.2):

The Oregon Department of Environmental Quality (DEQ), as the lead agency for the state of Oregon implementing the Environmental Mitigation Plan, has established a webpage on the VW Settlement and mitigation actions, <http://www.oregon.gov/deq/aq/programs/pages/vw-diesel-settlement.aspx>. DEQ is subject to Oregon Public Records and Public Meetings Laws, Oregon Revised Statutes (ORS) chapter 192. These laws and accompanying guidance prepared by the Oregon Attorney General outline best practice for public access to records and exemptions in the case of confidential business information and personally identifiable information meeting exemption criteria. To the limited extent information is submitted to DEQ that meets exemption criteria under the Public Records Law, DEQ will maintain that information as confidential.

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

Environmental Mitigation Funds will provide up to 30 percent or \$50,000, whichever is less, towards school bus replacement costs. Recipients provide the balance. If a recipient chooses to install diesel particulate filters, to be managed under Option 10 – DERA (5.2.12), costs to purchase and install are reimbursed up to 100 percent.

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

On February 5, 2018, DEQ provided notice, via email, of availability of Mitigation Action Funds to the parties named in 4.2.8 as well as the Bonneville Power Administration, the Federal Bureau of Prisons + Sheridan, the United States Coast Guard Pacific Area and the Army Corps of Engineers. DEQ also mailed the same notice to the Bend Field Office of the U.S. Bureau of Reclamation and the Oregon office of the U.S. Bureau of Land Management. The notice included a summary description of the Volkswagen legal issue including links to Appendix D-2, a listing of Eligible Mitigation Actions and instructions on how to sign up for notification about implementation steps, fund availability and application protocols for the program in Oregon.

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 program will reduce emission impacts to children riding on school buses as well as individuals who are themselves in the roadway travelling behind buses and individuals either living, working or simply occupying areas near public right of way where these vehicles operate. Studies have shown that children riding school buses have experienced a disproportionate impact simply by riding in the bus. School buses themselves are part of the larger diesel powered fleet that is common in Oregon. DEQ has completed analyses of exposure to toxic air contaminants including diesel emissions showing a disproportionate impact to communities of color and low income. This disproportionate impact comes from the operation of thousands of vehicles, of which diesel school buses are a small subset. This program is part of a larger effort undertaken by school districts across the state of Oregon to reduce emissions impacts from older diesel school buses.

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 Attached

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 Oregon, 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: 5.24.19



Brian Boling
Central Services Division Administrator
Oregon Department of Environmental Quality

[LEAD AGENCY]

for

State of Oregon

[BENEFICIARY]

ATTACHMENT B

**Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation
and Expenditures Timeline (5.2.4)**

PROJECT MANAGEMENT PLAN

PROJECT SCHEDULE AND MILESTONES

Milestone	Date
Notify school districts of lottery selection	May, 2018
Webinar/in-person briefing on program requirements for group of ~ 30 buses	Initial start July, 2018 – Cycle repeats approx. every three months
Grant agreements signed	Start + 4 weeks
Recipients complete procurement and submit purchase orders	Start + 9 weeks
Buses delivered	Start + 5 months
Recipients submits evidence of bus scrapping, invoices and other documents required for reimbursement	Start + 5.5 months
DEQ reviews, request corrections if necessary, certifies project completion, provides reimbursement	Start + 6.5 months
DEQ reports to Trustee on status of and expenditures with Mitigation Actions completed and underway	January 1 and July 1, ongoing

PROJECT BUDGET

Period of Performance: January 2019 – December 2019			
Budget Category	Total Approved Budget	Share of Total Budget to be Funded by the Trust	Cost Share, if applicable
1. Equipment Expenditure	\$ 17,071,756	\$5,311,189	\$ 11,760,567
2. Contractor Support	\$ 0	\$ 0	\$ 0
3. Subrecipient Support	\$ 0	\$ 0	\$ 0
4. Administrative ¹	\$ 351,000	\$ 351,000	\$ 0
Project Totals	\$ 17,422,756	\$ 5,662,189	\$ 11,760,567
Percentage	100%	32.2%	67.8%

¹Subject to Appendix D-2 15% administrative cap.

PROJECTED TRUST ALLOCATIONS

	2019	2020	2021
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$5,662,189	\$5,662,189	\$5,662,189
2. Anticipated Annual Cost Share	\$11,760,567	\$11,760,567	\$11,760,567
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$17,422,756	\$17,422,756	\$17,422,756
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$2,927,915	\$8,590,104	\$14,252,293
5. Current Beneficiary Project Funding to be paid through the Trust (line 1)	\$5,662,189	\$5,662,189	\$5,662,189
6. Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$8,590,104	\$14,252,293	\$19,914,482
7. Beneficiary Share of Estimated Funds Remaining in Trust	\$70,039,603	\$64,377,414	\$58,715,225
8. Net Beneficiary Funds Remaining in Trust, net of cumulative Beneficiary Funding Actions (line 7 minus line 6)	\$64,377,414	\$58,715,225	\$53,053,036

ATTACHMENT C

Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11)

The Oregon Department of Environmental Quality (DEQ), as the lead agency for the state of Oregon implementing the Environmental Mitigation Plan, has established a web page on the VW Settlement and mitigation actions, <http://www.oregon.gov/deq/air/programs/pages/vw-diesel-settlement.aspx>. DEQ posted links on that website to the documentation required to be made public under Paragraph 7 of the Appendix D-3 Certification for Beneficiary Status form. DEQ also is subject to Oregon Public Records and Public Meetings Laws, Oregon Revised Statutes (ORS) chapter 192. These laws and accompanying guidance prepared by the Oregon Attorney General outlines best practice for public access to records and exemptions in the case of confidential business information and personally identifiable information meeting exemption criteria. To the limited extent information is submitted to DEQ that meets exemption criteria under the Public Records Law, DEQ will maintain that information as confidential.

Funding requests and expenditure reporting

DEQ is directly soliciting eligible projects among school districts in a process outlined in authorizing legislation (SB 1008, 2017). In the future, we anticipate authorization for funding among other eligible mitigation categories. In this situation projects may be solicited by a competitive process selecting projects by scoring against identified criteria. In either case, records of the applicant and selected projects will be posted and made available on the DEQ web page on the VW Settlement and mitigation actions and on the Oregon Records Management System (ORMS), which is also publicly accessible via the Internet. Information about the project and expenditures in the ORMS will be accessible via readily available search procedures. Records will be retained until the termination date of the Environmental Mitigation Fund or by retention schedules determined by the State Archivist under ORS 192.105, whichever is longer.

ATTACHMENT D

**Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding
\$ 25,000 (5.2.6)**

School Bus Replacement Projects

Bus Style	Diesel	Propane	Gasoline	Electric
Type A	\$ 60-85,000	\$ 60-95,000	\$ 55-77,000	\$ 225-260,000
Type B	NA	NA	NA	NA
Type C	\$ 90-125,000	\$ 105-142,000	\$ 85-123,000	\$325-355,000
Type D	\$ 105-170,000	NA	NA	\$ 365-400,000



State of Oregon Department of Environmental Quality

Attachment E – DERA Option

FY 2018 State Clean Diesel Grant

Program Work Plan and Narrative

**FISCAL YEAR 2018 – NOTICE OF INTENT TO CONTINUE – SUPPLEMENTAL
AMENDMENT**

STATE CLEAN DIESEL GRANT PROGRAM

WORK PLAN AND BUDGET NARRATIVE TEMPLATE (revised 9/27/2018)

SUMMARY PAGE

Project Title: Oregon School Bus Replacement Program – FY 2018

Project Manager and Contact Information

Organization Name: Oregon Department of Environmental Quality

Project Manager: Eric Feeley

Mailing Address: 700 NE Multnomah Street

Portland, Oregon 97232

Phone: 503.229.6549

Fax: 503.229.6954

Email: feeley.eric@deq.state.or.us

Project Budget Overview:

	FY 2017	FY 2018
EPA Base Allocation	\$ 236,915	\$ 275,466
State or Territory Matching Funds (if applicable)	\$ 236,915	\$ 275,466
EPA Match Incentive (if applicable)	\$ 118,458	\$ 137,733
Mandatory Cost-Share	\$ 1,005,189	\$ 1,832,316
TOTAL Project	\$ 2,308,222	\$ 2,520,981
Additional Leveraged Resources	\$ 710,745	\$ 0

Project Period

October 1, 2017 – September 30, 2019

Summary Statement

In fiscal years 2012 and 2014 through 2017, EPA conducted a national solicitation of interest to participate in a rebate based program for school bus replacement. Over time several thousand school districts nationally have submitted qualifying applications that were rank ordered by a random number scheme. Funding was provided as available for the top ranked requests,

including in Oregon, one in 2012, two in 2014, one in 2015, two in 2016 and three in 2017. All scored requests were determined to be eligible for funding according to EPA program goals and guidelines. Thirty four districts in Oregon were determined to qualify but were not funded. This project will proceed through the list of remaining qualified Oregon school districts to determine ongoing interest in replacing school buses under the terms of current EPA grant guidelines. Since the beginning of the multiyear school bus replacement project, we replaced a total of 39 buses through a combination of EPA DERA and matching funds. For the FY 2018 project period, we anticipate replacing or upgrading a minimum of 27 buses. The final count is dependent on actual pricing received from procurement processes for eligible activity and the technology approach, replacement versus repowering and retrofitting, selected by school districts.

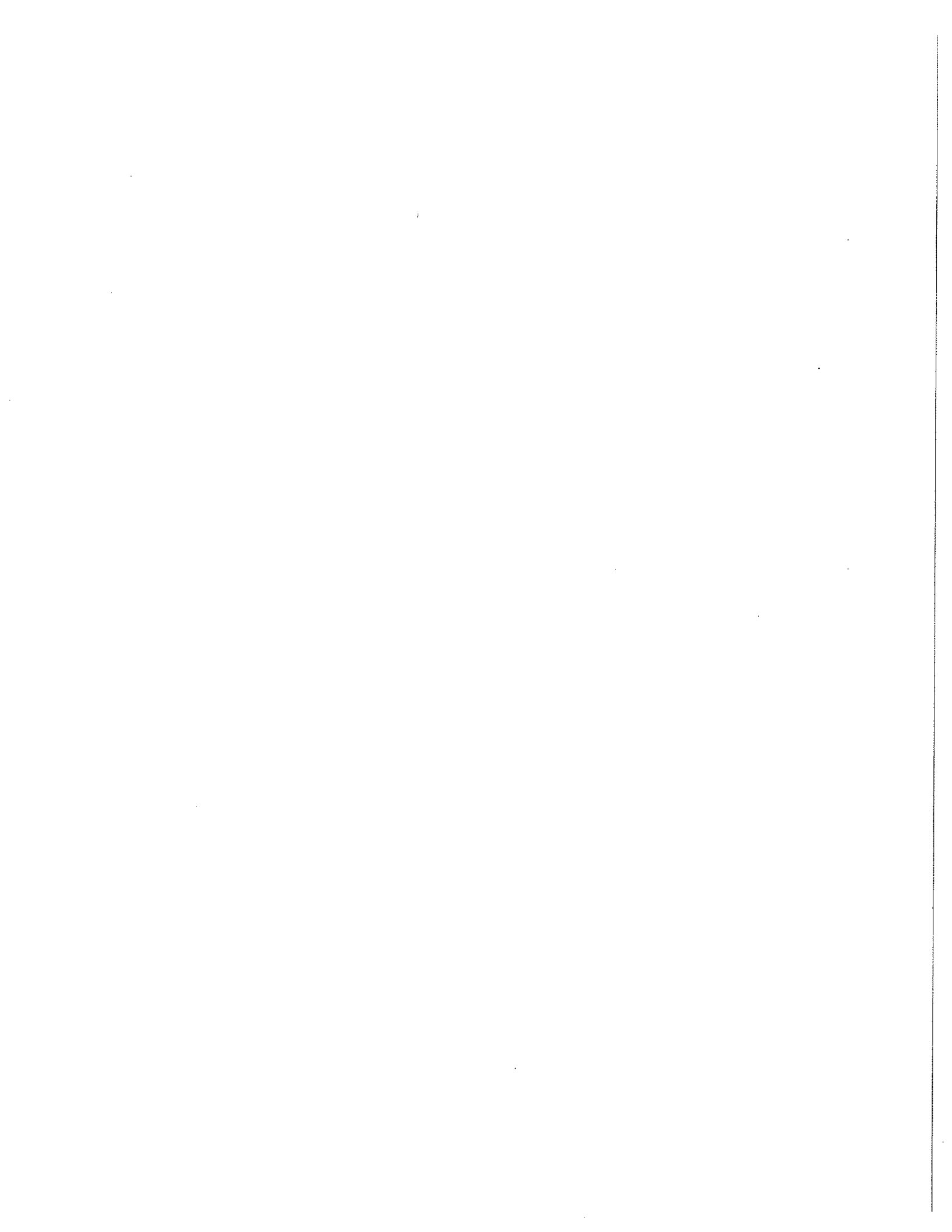
Notice of this project will also be posted on DEQ's webpage, <http://www.oregon.gov/dcq/air/programs/Pages/Diesel-Success-Stories.aspx>, Facebook page <https://www.facebook.com/oregondeq> and on its Twitter account.

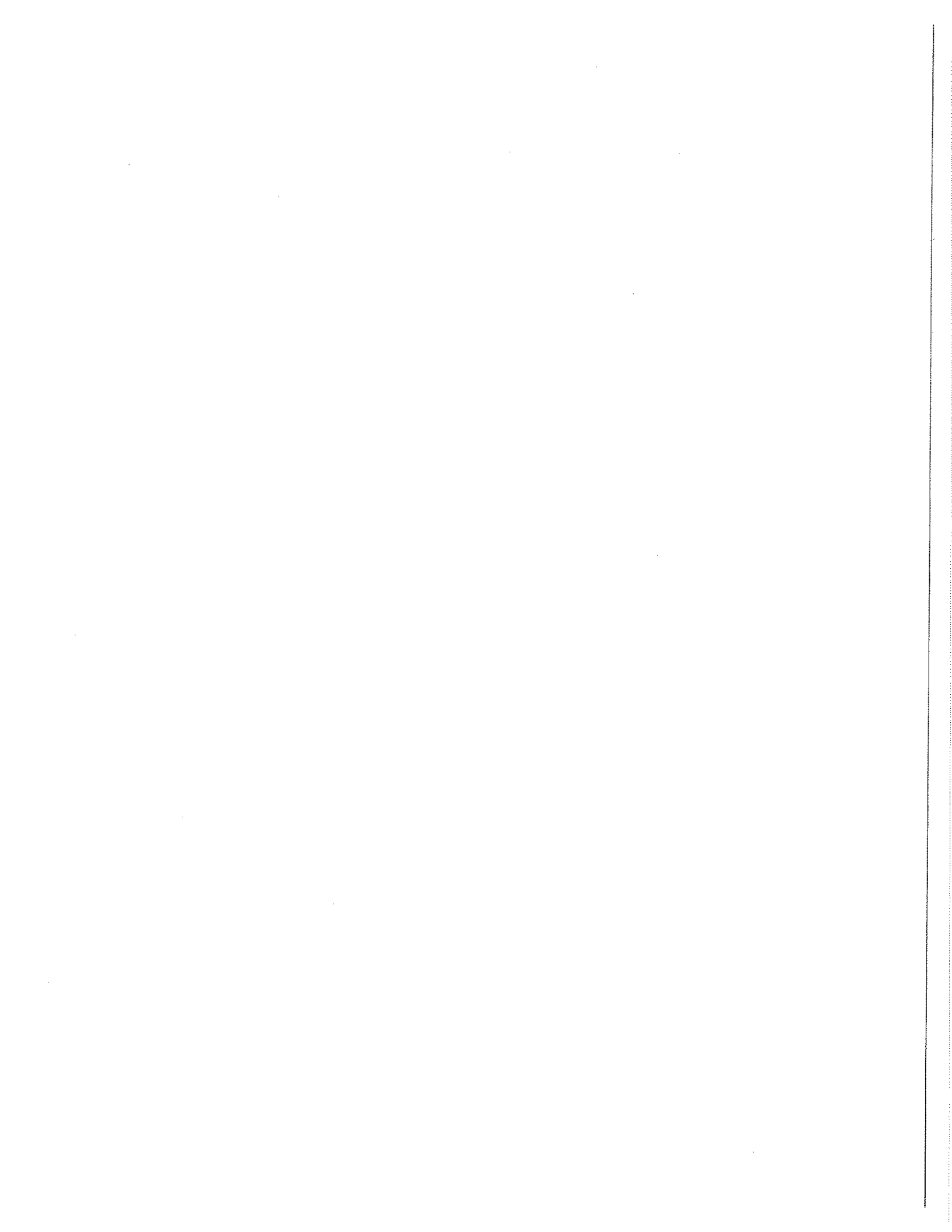
SCOPE OF WORK

STATE/TERRITORY GOALS AND PRIORITIES: While air quality is generally good in regards to criteria air pollutants, other pollutants, including diesel particulate matter, represent ongoing challenges for healthy air quality within Oregon benchmarks for air toxics. According to the 2011 NATA results, the statewide concentration for diesel particulate is 0.34 ug/m^3 . The Oregon benchmark for increased risk for cancer from exposure to diesel particulate matter is 0.1 ug/m^3 . Although further analysis is required to account for exposure, this would suggest about 92% of Oregonians may experience elevated health risk from diesel engine exhaust.

Heavy-duty on-road vehicles, including trucks and buses, are the largest contributors to emissions followed by non-road construction equipment. School buses are not a major contributor within the on-road category, however they constitute a priority focus based on exposure to children. Recent research looking at the effects of installing exhaust controls on school buses documented reduced absenteeism for children travelling to and from school in lower emission buses. This project assists school districts in meeting the goals outlined in ORS 468A.796 and will serve to make school buses not only the safest way to get to school but also one of the healthiest transport options to school.

VEHICLES AND TECHNOLOGIES: The project will contribute to pollution reduction strategies including aftermarket installation of exhaust controls, repowering of diesel engines or replacement of older, polluting diesel school buses with new, low emitting equivalent vehicles. The buses are owned by targeted school districts or are privately owned but operating under contract with districts. A minimum of 27 buses are projected for emission upgrades in one of the three technology techniques described above for this FY 2018 project. The vehicles selected for replacement will meet all relevant conditions for replacement, equivalency and model years as outlined in current applicable EPA diesel award guidance. The buses purchased in this project will be powered by 2017 or newer model year engines. Exhaust controls, if installed, will be verified by either EPA or CARB protocols.





ROLES AND RESPONSIBILITIES: The FY 2018 project will be a continuation of efforts started with the FY 2014 award. The Oregon Department of Environmental Quality will communicate with Oregon school districts that qualified but were not funded under the previous EPA Clean School Bus Rebate Program to determine a current interest in treating school buses under the FY 2018 grant guidelines. The state of Oregon will enter into subagreements with the school districts to achieve fundamentally identical outcomes to what is achieved with otherwise successful Rebate applicants.

The Oregon districts in Table 1 were qualified to participate but were not funded in the prior EPA school bus rebate offerings. They will be contacted to confirm their current interest in participating in a school bus replacement project according to the FY 2018 State Clean Diesel Grant Program Information Guide. To meet the match requirements and possibly result in leveraged funding, DEQ will use funds authorized to the state under Appendix D of the Volkswagen Consent Decree. These funds would be used to meet the DERA Funding Limit.

Table 1 Oregon School Districts – Previous Unsuccessful EPA Rebate Applicants

Crow - Applegate - Lorane School District #66	Jewell School District #8	Parkrose School District #3
Mitchell School District #55	Monument School District #8	Redmond School District
Hood River County School District	Ashland School District #5	Ontario School District 8C
Sisters School District #6	St. Paul School District	Central School District 13J
Bethel School District No. 52	Dayville School District 16j	Lebanon Community School District #9
Baker School District 5J	Beaverton School District, Transportation Service Center	Greater Albany Public Schools
Grant School District #3	Estacada School District	Harrisburg School District #7
Jefferson County School District 509J	Sherwood School District	Seaside School District 10
Warrenton-Hammond School District #30	Port Orford/Langlois School District	David Douglas School District #40
Prairie City School District #4	Hillsboro School District #1J	South Lane School District #45J3
Klamath Falls City Schools	Prairie City	Echo School District

To qualify school districts will agree to replace or upgrade one or more school buses in accordance with the FY 2017-18 State Clean Diesel Grant Program Guidance.

Current Engine Model Year (EMY)	DPF	Vehicle or Engine Replacement: 2017+ EMY	Vehicle or Engine Replacement: Electric or Clean Alternative Fuels
1995 to 2006	Yes	Yes	Yes

The older buses will have a remaining useful life such that they would not have been removed from service before September 30, 2021. The new buses will be the same type and similar horsepower to the older bus being replaced and be engine model year 2017 and newer.

The older buses will be scrapped or rendered permanently disabled using EPA approved methodologies. Evidence of appropriate disposal will be provided. Equipment and components that are salvaged from the bus being replaced can be sold and used as program income to offset school district program participation costs.

Funds from the FY 2018 DERA allocation will be paid out to the districts to reimburse up to 25% of the new bus replacement costs and 40% of eligible engine replacement costs and 100% of eligible exhaust aftertreatments. The participating school districts will contribute matching and leveraged funds to complete the purchase from non-federal funds. The commitment to provide matching funds will be enforced through grant agreements with the participating school districts.

The new buses will be owned and operated for ongoing service in the transport of school children to and from school by the district or contractor with whom the subagreements have been made.

TIMELINE AND MILESTONES:

Milestones	Due Date
EPA Award finalized	Oct 2018
Sub-grant agreements signed	Dec 2018- April 2019
Procurement process completed	Feb 2019- June 2019
Order placed for replacement buses	Feb 2019 – June 2019
Replacement buses delivered, older buses scrapped	June – September 2019
Quarterly reports filed to EPA	January, 2019 April, 2019 July, 2019 October, 2019
Final report to EPA	90 days after final closeout

DERA PROGRAMMATIC PRIORITIES: This project will meet several of the programmatic priorities outlined in the Diesel Emissions Reduction Act. These school districts have already been selected and qualified as meeting programmatic priorities when approved for consideration under previous years School Bus Replacement Funding Opportunities. Those project parameters ensure that all projects that receive funding meet the DERA national priorities. The eligible projects will maximize public health benefits, are the most cost-effective, serve areas that receive a disproportionate quantity of air pollution from diesel fleets (schools), include a certified engine configuration and maximize the useful life of the certified engine configuration. While the districts are located throughout the state, with varying levels of ambient exposure to diesel particulate, several studies have shown that diesel school buses may self-pollute, leading to elevated exposures while riding or being in proximity to the bus. Low emission school buses have also been shown to reduce absenteeism. The grants provided under this program will reduce those exposures to a sensitive population, school age children.

EPA'S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS: Replacing older, diesel powered school buses will reduce emissions that have a deleterious effect on human health and the environment. Specifically, it supports EPA's 2018-2022 Strategic Plan Goal 1 "Core Mission: Deliver real results to Americans with clean air, land, and water, and ensure chemical safety" and Objective 1.1 "Improve Air Quality". The funded activities will reduce diesel emissions from the existing school buses through a variety of upgrades, e.g., exhaust aftertreatment, engine repowering or vehicle replacement. The school district will choose the optimal strategy for their needs.

Projected Air Quality Improvements Achieved

Reductions	PM	NOx	CO	HC	CO ₂
Annual (Tons/year)	0.149	1.742	0.842	0.229	30.6
Lifetime (Tons)	1.045	12.197	5.895	1.601	214.2

Emission reductions were calculated using the Diesel Emission Quantifier.

DEQ will track progress of the project and, upon project completion, calculate emission reductions using tools like the Diesel Emission Quantifier.

Outcomes

Short-term:

DEQ will promote the project among interested parties as well as consider additional opportunities within the local media.

Medium-term:

Diesel emissions within the selected school districts will be reduced.

Long-term:

- Number of children with asthma and other health problems related to diesel emissions will be reduced.
- Ambient air quality will improve in the targeted communities.
- Excess cancer risk from exposure to diesel particulate matter will be reduced. Notable atmospheric change impacts will be eliminated from the operation of the buses due to the reduction in gases like carbon dioxide and other atmospheric warming forcings like black carbon.

SUSTAINABILITY OF THE PROGRAM: The school districts will continue to provide ongoing maintenance of the buses to ensure a long, useful life. They will report miles travelled for the buses annually to DEQ for three years following purchase. The Department will promote opportunities to publicize the project within the communities where these vehicles operate and will continue to use these efforts to lead others to take similar actions.

Oregon DEQ will provide a public notification that lists project information on the State website within 60 days of the grant notification. Website postings will describe the project, the types of vehicles funded and dollar amount of grants.

BUDGET NARRATIVE

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
FY2018 Clean Diesel Grant Program
School Bus Replacement

	Qty	Unit	Unit Rate	Federal	Voluntary	Mandatory	Total
1 PERSONAL SERVICES (PS)							
NATURAL RESOURCE SPECIALIST 4, AA, AD, Step 9, Loc - H&R	1.80	mo. @	\$7,021 / mo.	12,603	-	-	12,603
NATURAL RESOURCE SPECIALIST 4, AA	0.18	mo. @	\$7,021 / mo.	-	1,258	-	1,258
Subtotal Salaries				\$12,603	\$1,258	\$0	\$13,861
2 FRINGE BENEFITS (Fringe)							
NATURAL RESOURCE SPECIALIST 4, AA, AD, Step 9, Loc - H&R	12,603	@	52.59% * Sal.	6,628	-	-	6,628
NATURAL RESOURCE SPECIALIST 4, AA	1,258	@	53.18% * Sal.	-	669	-	669
Subtotal Benefits				\$6,628	669	\$0	\$7,297
<i>Fringe Rates: Are shown as a percentage of Personal Service Salary amounts, and comprised of a combination of several factors such as FICA/Med care, Worker's Comp, Pension Costs, Medical/Dental, etc.</i>							
3 TRAVEL							
Instate Travel				-	-	-	-
Interstate Travel				-	-	-	-
Subtotal Travel				\$0	\$0	\$0	\$0
4 EQUIPMENT				\$0	\$0	\$0	\$0
5 SUPPLIES	1.97	mo. @	\$65 H&R / \$60 VIP / \$45 Lab Per Pos/Month	\$117	\$12	\$0	\$129
6 CONTRACTUAL:			\$0	\$0	\$0	\$0	\$0
7 CONSTRUCTION				\$0	\$0	\$0	\$0
8 OTHER SERVICES							
Employee Training	1.97	mo. @	\$90 H&R / \$20 VIP / \$65 Lab Per Pos/Month	162	16	-	178
Telecommunications	1.97	mo. @	\$85 H&R / \$130 VIP / \$95 Lab Per Pos/Month	153	15	-	168
Data Processing	1.97	mo. @	\$35 H&R / \$75 VIP / \$35 Lab Per Pos/Month	63	6	-	69
Facilities Rental	1.97	mo. @	\$45 H&R / \$1450 VIP / \$2250 Lab Per Pos/Month	1,337	134	-	1,471
Fuels & Utilities	1.97	mo. @	\$9 H&R / \$165 VIP / \$31 Lab Per Pos/Month	16	2	-	18
Facility Maintenance	1.97	mo. @	\$8 H&R / \$25 VIP / \$2 Lab Per Pos/Month	14	Z -1 *	-	15
Other Services	1.97	mo. @	\$275 H&R / \$435 VIP / \$1385 Lab Per Pos/Month	494	49	-	543
Expendable Property	1.97	mo. @	\$32 H&R / \$35 VIP / \$325 Lab Per Pos/Month	57	6	-	63
IT Expendable Property	1.97	mo. @	\$110 H&R / \$92 VIP / \$92 Lab Per Pos/Month	197	20	-	217
Sub Awards							
To School Districts for 18 School Bus Replacements, 4 Repowers and 5 Retrofits							
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Replacement	1.00	@	\$130,000	32,500	-	97,500	130,000
School Bus Repower	1.00	@	\$32,215	12,888	-	19,329	32,215
School Bus Repower	1.00	@	\$32,215	12,888	-	19,329	32,215
School Bus Repower	1.00	@	\$32,215	12,888	-	19,329	32,215
School Bus Repower	1.00	@	\$32,215	12,888	-	19,329	32,215
School Bus Filter Installation	1.00	@	\$4,760	4,760	-	-	4,760
School Bus Filter Installation	1.00	@	\$4,760	4,760	-	-	4,760
School Bus Filter Installation	1.00	@	\$4,760	4,760	-	-	4,760
School Bus Filter Installation	1.00	@	\$4,760	4,760	-	-	4,760
School Bus Filter Installation	1.00	@	\$4,760	4,760	-	-	4,760
Subtotal Other Services				389,951	\$273,135	\$1,832,316	\$2,495,402
9 OVERHEAD / INDIRECT	20.28%	of Total (PS+Fringe)		\$3,900	\$391	\$0	\$4,291
10 TOTAL PROJECT COST				\$413,199	\$275,466	\$1,832,316	\$2,520,981

* min fee by
10/25/18

1. Personal Services

The Personal Services calculation is based on 1.97 months of work (.082 FTE) of a Natural Resource Specialist 4. Months of work and FTE are rounded for display purposes.

2. Fringe Benefits

Fringe benefits are shown as a percentage of personal service salary amounts, and comprised of a combination of several factors such as FICA/Medicare @ 7.65%, Pension Costs @ 25.09%, Medical/Dental, Workman's Comp., and Unemployment @ \$1,394/month.

3. Travel

This request does not include Travel.

4. Equipment

This request does not include Equipment.

5. Supplies

Typical categories of Office Supplies are: Paper, pens, pencils, staplers, & misc. desktop items. Cost estimates for office supplies are based on an average monthly cost per FTE. These costs are not included in the indirect rate.

6. Contractual

This request does not include Contractual costs.

7. Construction

This request does not include Construction costs.

8. Other Services

The service costs in "Other Services" have been updated and are based on annualized actual historical costs for the rolled-up categories required by EPA for planning and reporting. These estimates are derived from a wide range of different DEQ program activities. Some specific activities have higher costs in some categories, whereas others have lower costs. On the average, however, our estimates for TOTAL S&S costs are close to the costs actually incurred in the course of completing our work. None of the costs within this category are included in the indirect rate.

Telecommunications

Cost estimates for telecommunications are based on an average monthly cost per FTE.

Data Processing

Typical data processing service charges are comprised of computer mainframe support, server support, peripheral support, and computer processing support. Cost estimates for data processing services are based on an average monthly cost per FTE.

Facilities Rental

Cost estimates for facilities rental are based on an average monthly cost per FTE.

Other Services

- Postal & delivery services
- Other miscellaneous office services (such as equipment relocation)
- Rental of office equipment
- State of Oregon Motor Pool Assessment Allocation (based on usage)

Expendable Property & IT Expendable Property

Reusable items purchased for under \$5,000 (and that have a useful life beyond a year) are categorized as Expendable Property & IT Expendable Property. Items typically found in this category are personal computers and related software, office furniture, and expensed technical equipment when related to laboratory work.

Sub Awards to Oregon School Districts

Payments will be passed through to Oregon school districts previously identifying as qualified applicants under the EPA National School Bus Rebate program for the purpose of purchasing diesel particulate filters, engine repowers or replacement school buses. A combination of federal funds and Volkswagen Settlement Appendix D funds allocated to the state of Oregon will be passed through to the school districts for no more than the DERA funding limits.

Matching funds for the project that covers the Mandatory Cost Share from project activities, i.e., 75% of bus replacement costs or 60% of engine repowering, are provided by school districts.

The distribution of funding among the technology choices possible will be determined by the choices made by school districts based on their evaluation of optimal eligible technologies. For purposes of this budget, we estimated 5 engine repower/filter installations and 17 bus replacements. An estimated distribution of costs from this projected outcome is shown below.

	Engine Repower 4 Total (\$32,215 each)	Filter Installation 5 Total (\$4,760 each)	Vehicle Replacement 18 Total (\$130,000 each)	All Other Expenses	Totals
Federal EPA	\$38,658	\$23,800	\$325,000	\$25,741	\$413,199
Voluntary/Mandatory	\$90,202	\$0	\$2,015,000	\$2,579	\$2,107,781
Totals	\$128,860	\$23,800	\$2,340,000	\$28,320	\$2,520,981

9. Overhead/Indirect

The indirect rate of 20.28% is documented in an indirect cost rate negotiation agreement with EPA dated, August 22, 2017.