

For reference:

The following documents were a part of the 2026 Washington Department of Ecology Application Package.

Project Title*	Switcher Locomotive, Tugboat, Emergency Vehicle, Paratransit, and Local Freight Decarbonization
Project Short Description*	City of Redmond requests \$1,500,000 in grant funding to purchase an NFPA-certified, Type 1 electric fire engine
Project Long Description	<p>In September 2020, the City of Redmond formally declared a climate emergency and adopted measurable policies through its Environmental Sustainability Action Plan (ESAP), including achieving carbon neutrality from municipal operations by 2030, divesting from fossil fuels, and implementing comprehensive monitoring of municipal energy and carbon impacts. These policies directly align with the goals of the Volkswagen Environmental Mitigation Trust (VW EMT), which prioritizes permanent reductions in nitrogen oxides (NO_x) and diesel emissions through the replacement of older diesel engines with zero-emission alternatives.</p> <p>To achieve meaningful emissions reductions, the City identified heavy-duty municipal equipment—particularly fire apparatus—as a priority sector. Fire engines are high-emitting diesel vehicles that operate under frequent load, idle extensively during emergency response and training, and are typically located within residential neighborhoods. Based on EPA and CARB emissions factors, over a conservative 15-year service life, an EV fire engine can displace approximately 270 metric tons of CO₂ and 1.95 metric tons (3,900 pounds) of NO_x. Replacing a diesel engine with a battery-electric fire engine eliminates these emissions at the point of use, directly advancing VW EMT mitigation objectives.</p> <p>In October 2021, the Redmond Fire Department adopted a community-driven strategic plan that included explicit environmental sustainability goals and evaluation of alternative fuels for fire apparatus. In November 2022, a team of Redmond firefighters traveled to Madison, Wisconsin, to evaluate the first electric fire engine in active front-line service in North America. The evaluation focused on operational performance, reliability, and firefighter safety, and concluded unanimously that electric fire apparatus could meet or exceed Redmond's emergency response needs while significantly reducing emissions and noise impacts.</p> <p>Following this evaluation, the City was awarded \$587,154 through the Washington State Department of Ecology Air Quality Volkswagen DERA Grant. In March 2025, Redmond placed the first electric fire engine in service in the State of Washington, demonstrating operational feasibility, trained staffing, and reduced implementation risk.</p> <p>Building on this proven success, the City seeks funding through the Air Quality Volkswagen Rails, Keels and Wheels Grant to purchase a second NFPA-certified, Type 1 electric fire engine. This project will permanently retire a 2002 diesel fire engine, resulting in estimated lifetime emissions reductions of approximately 1.95 metric tons of NO_x and 270 metric tons of CO₂, while eliminating diesel particulate matter and toxic exhaust exposure.</p> <p>The electric fire engine will be assigned to Fire Station 11, which serves neighborhoods scoring “8” and “9” on the Washington Environmental Health Disparities Map—areas disproportionately impacted by diesel emissions. Fire Station 11 is currently being upgraded with DC Fast Charging capabilities, a project approved in 2024, so no funding will be needed for infrastructure.</p> <p>The City has a robust community engagement plan that is based in part on the success of the first EV fire engine outreach plan.</p>

The City of Redmond respectfully requests \$1,500,000 to offset the \$2,423,050 cost of a new EV fire engine, and to accelerate diesel displacement, improve air quality in overburdened communities, and advance the intent of the Volkswagen Environmental Mitigation Trust while maintaining the highest standards of emergency response. The City of Redmond can meet all grant requirements by the deadline of October 31, 2027.

Total Cost* \$2,423,050.24 Total Eligible Cost* \$1,500,000.00

Effective Date* 01/08/2026 Expiration Date* 03/09/2026

Ecology Program* AQVW

Project Category* Rails, Keels, and Wheels

Will Environmental Monitoring Data be collected? No

Overall Goal* Reduce harmful air pollution and greenhouse gas emissions associated with diesel vehicles and equipment. Help accelerate the transition to zero emission and increase public awareness of zero-emission technology feasibility.

Project Themes

Select a primary and secondary theme that best describes the work to be achieved during this project.

Primary Theme: Air Quality
Secondary Theme(s): Volkswagen - Settlement

Project Website

If your project has a website, please enter the web address below. To add another website, click the + button to the right. Up to three websites may be provided. To delete a website, click the - button to the right, then click confirm.

Website Title/Name

Website Address

Location Type	Location Value	Location Percent
Ecology Region	NWRO	100%
County	King	100%
Congressional District	1	99%
Congressional District	8	0%
Congressional District	9	0%
Legislative District	45	33%
Legislative District	48	66%
Water Resource Inventory Area (WRIA)	8 (Cedar - Sammamish)	100%

Project Manager

Adrian Sheppard

Contact Information

Fire Chief
8450 161st Ave NE
Redmond, Washington 98052-
3848
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Authorized Signatory

Adrian Sheppard

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Billing Contact

Adrian Sheppard

Contact Information

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asheppard@redmond.gov

Other recipient signatures on printed agreement

Name

Title

*1. Have you read the guidelines for this grant opportunity? Yes No
Date guidelines were read: 12/09/2025
Initials: MD

*2. Please select your project category. Note: applicants may apply for more than one **vehicle/category**, but must submit separate applications for each project.
To request additional applications beyond the initial five, please contact the VW grants team at wwsettlements@ecy.wa.gov.

- Emergency Vehicles Class 8 (> 33,001 lb.)
- Emergency Vehicles Class 4 - 7 (14,001-33,000 lb.)
- Freight Switcher Locomotive
- Tugboat
- Other Class 8 Vehicle (> 33,001 lb.)
- Other Class 4-7 Vehicle (14,001-33,000lb.)

*3. What is the average annual fuel consumption of the diesel vehicle/equipment proposed for repower or scrap?
754

*4. What is the engine model year of the diesel vehicle/equipment proposed for repower or scrap?
2002

- *5. Please select your organization type:
- Business registered in the State of Washington
 - Non-profit 501(c)(3) organizations
 - City
 - County
 - State Government
 - Public Utility District
 - Public port / public port authority
 - School district, public college, university
 - Tribe
 - Other

*6. Do you own the vehicle/equipment you intend to scrap and replace or repower?
Yes
No

*7. Please enter the address where the fueling infrastructure to support the new zero emission vehicle/equipment will be installed.
8450 161st. Ave. NE. Redmond, WA 98052

*8. Is the address where the fueling infrastructure will be installed on land managed by a Tribal Government?
Yes
No

*9. What type of fueling infrastructure will you install to support the proposed zero emission vehicle/equipment?
 Level 2
 DC Fast Charger
 Hydrogen

*10. Do you own the property on which the fueling infrastructure will be installed? Note: If you do not own the property, you must submit a Site-Host agreement certifying you have permission to install fueling infrastructure.
Yes
No

*11. Will the installation of fueling infrastructure have the potential for ground disturbance? If yes, Please describe the extent of ground disturbance in the text box below. Example: trenching to install conduit and a concrete pad to support the EVSE installation.

Yes

No

The charging infrastructure for this location (Fire Station 11) is already being installed to charge existing electric vehicles, separate from this grant request.

*12. To be eligible for award, your organization must agree to provide community outreach to inform your service area of the benefits of decarbonizing transportation. Please upload your Community Engagement Plan. A Community Engagement Plan template is available on the Application Menu page.
2527AQVWRKWCommunityEngagement.docx

*13. Please upload a quote for the purchase and installation of fueling infrastructure. This should include all eligible projects costs. Ecology will use this information to verify grant funding amounts. **NOTE: Do not pre-order. Pre-ordered vehicles/equipment do not qualify for a grant.**
No Fueling Equipment to be Requested.docx

*14. Please upload a quote for the new zero emission vehicle/piece of equipment you are proposing to purchase or repower. Ecology will use this information to verify grant funding amounts. **NOTE: Do not pre-order. Pre-ordered vehicles/equipment do not qualify for a grant.**
MC1092 Redmond Volterra Quote 010526.pdf