

State of Oregon Department of Environmental Quality

HB 2007 - VW Rulemaking and Background

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Overview

Oregon Department of Environmental Quality has an opportunity to reduce diesel emissions by allocating Oregon's entire Volkswagen Environmental Mitigation Fund (VW). The 2019 Oregon Legislature's passage of HB 2007 authorizes the creation of a grant program supporting businesses, governments, and equipment owners in replacing older diesel engines with new, cleaner engines and exhaust control retrofits. DEQ has been conducting reducing emissions from diesel engines for over 15 years, primarily with Federal programs like the Diesel Emission Reduction Act (DERA) and Congestion Mitigation and Air Quality (CMAQ). With approximately \$73 million in total funding HB 2007 expands the number and type of projects DEQ can fund to improve air quality.

This paper outlines the existing guidelines regulating the use of VW funds, key policy and implementation issues presented by HB 2007, proposed grant award timelines, and next steps. The purpose of this document is to provide decision makers and stakeholders with a shared understanding of the program and the key decision points to resolve during rulemaking. DEQ is assembling an advisory committee for this rulemaking. The purpose of this committee is to:

- Help clarify and interpret the Volkswagen Environmental Mitigation Grant Fund in HB 2007
- Make recommendation on basic program design
- Consider eligibility and project selection criteria
- Think about project solicitation processes and timing
- Advise on what should go into rule versus program guidance

Diesel Emissions

Diesel exhaust is a complex mixture of pollutants including carbon monoxide, sulfur oxides, volatile organic compounds, and very fine particles coated with compounds that can cause adverse health effects. The amount of emission benefits realized will depend on the selected strategy. Diesel particulate filters can effectively and affordably reduce up to 90% of NOx, 95% of PM, and 98% of black carbon. Alternate fueled vehicles also provide significant reductions compared to older diesel engines.

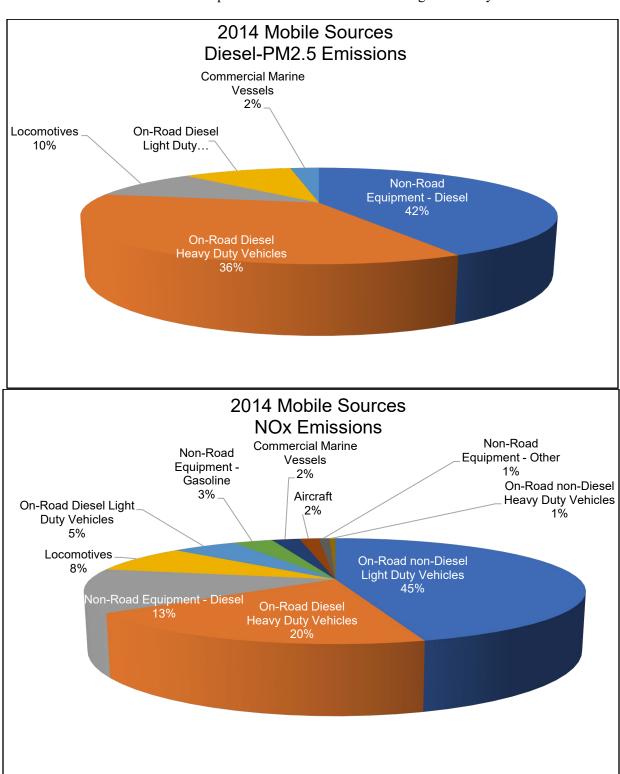
The Environmental Protection Agency has estimated, on a national basis, the expected health and welfare benefits that will come from reduced diesel emissions as a result of federal rules requiring lower emitting engines. It has estimated that by 2030 if most of the heavy duty trucks are operating with lower emitting engines, 8,300 premature deaths, more than 9,500 hospitalizations and 1.5 million work days lost per year would be avoided. ^{1 2} Similar estimations were made for non-road, train and marine engine analyses.

¹ EPA Regulatory Impact Analysis: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, Pg. xv: https://archive.epa.gov/midwestcleandiesel/web/pdf/exec-sum.pdf

https://nepis.epa.gov/Exe/ZyPDF.cgi/P1002K4H.PDF?Dockey=P1002K4H.PDF

² Regulations Requiring Onboard Diagnostic Systems on 2010 and Later Heavy-Duty Engines Used in Highway Applications Over 14,000 Pounds, Pg. 4:

The National Emissions Inventory (NEI) is a comprehensive estimate of air emissions of criteria pollutants, criteria precursors, and hazardous air pollutants (including diesel particulate matter) from air emissions sources. The NEI is released every three years based on data provided by state, local, and tribal air agencies for sources in their jurisdictions and data developed by the US EPA. The most recent charts available show the sources of diesel particulate matter and NOx in Oregon for the year 2014.



Diesel emissions profiles vary widely among equipment types that are eligible to be replaced, repowered, or retrofit under the VW Environmental Mitigation Trust Agreement. Based on direction from HB 2007, research indicating public health benefits associated with lower emission engine, and the profile of diesel emissions in Oregon DEQ will seek to balance the availability of funds across diesel equipment types to maximize emissions reductions from grant application proposals.

VW Environmental Mitigation Trust Agreement

Since 2009, the Volkswagen Group of America—under the Volkswagen, Audi and Porsche nameplates—sold diesel passenger cars in the United States with emission control defeat devices that violated federal motor vehicle emission standards. Litigation against Volkswagen resulted the creation of the VW Environmental Mitigation Trust Agreement³ that requires Volkswagen to provide more than \$2.9 billion nationwide to mitigate previous and current excess emissions of nitrogen oxides by these noncompliant vehicles.

The initial allocation to the state of Oregon (based on registration share of VW diesels by state) is approximately \$73 million, which must be spent in 10 years, by the deadline of Oct. 2nd, 2027. These funds must be used to upgrade diesel equipment from older and more polluting engines to newer, cleaner technology. The Trust Agreement strictly limits projects that can be funded, and the amounts of funding available for different projects, by equipment model year, type, and owner.⁴

Oregon DEQ and all project partners must adhere to VW Environmental Mitigation Trust Agreement limits and requirements during all diesel emission reduction grants, which will be reflected during rulemaking.

Diesel Emissions Reduction Act (DERA)

DERA is a federally funded program designed to contribute to the replacement of older, polluting diesel equipment with new, low emitting equivalent vehicles. If a state can demonstrate matching nonfederal funds for comparable eligible activity, EPA will increase the award amount by 50 percent. Oregon's allocation of VW funding is eligible to be used as match, increasing the overall amount of funding available for this work. When VW funds are spent as DERA match, the projects must follow all applicable DERA guidance.

The total amount of DERA funding in Oregon from 2008-2018 has been approximately \$14.6 million. The DERA program strictly limits projects that can be funded, and the amounts of funding available for different projects, by equipment model year, type, and owner.⁵

HB 2007 and Related Oregon Statute

³ VW Environmental Mitigation Trust Agreement: https://www.vwenvironmentalmitigationtrust.com/sites/default/files/2019-04/Modified%20State%20Trust%20Agreement 1.pdf

⁴ Detailed Comparison of VW Eligible Mitigation Action 1-9 and Eligible Mitigation Action #10 (DERA Option) For FY 2019 State DERA Grants: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100WKF6.pdf

⁵ Detailed Comparison of VW Eligible Mitigation Action 1-9 and Eligible Mitigation Action #10 (DERA Option) For FY 2019 State DERA Grants: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100WKF6.pdf

In both 2017 and 2019 the Oregon Legislature provided specific direction to Oregon DEQ regarding how to allocate available resources from the VW fund. SB 1008 requires DEQ to address at least 450 diesel powered school buses with emission reduction strategies including either bus replacement or exhaust control retrofitting. The assistance amount offered will be up to 100 percent of the cost to purchase and install exhaust controls or up to \$50,000 or 30 percent, whichever is less, towards the purchase an Oregon minimum standard bus. The school bus program will draw between \$18 - 22 million.

HB 2007 authorizes DEQ to disburse the remaining funds in the form of grants for the purposes of reducing diesel engine emissions. The bill establishes several priority criteria for consideration during review of grant applications, including:

- a) Support compliance with section 4 of this 2019 Act or with contract specifications or preferences related to emissions standards for diesel engines established by a public body, as defined in ORS 174.109;
- b) Be carried out by a grant applicant that is a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business, as those terms are defined in ORS 200.005;
- c) Involve the replacement, repower or retrofit of one or more motor vehicles or pieces of equipment that have at least three years of remaining useful life at the time that the grant agreement is executed;
- d) Support the utilization of fuels for which regulated parties may generate credits under the clean fuels program adopted by rule by the Environmental Quality Commission under ORS 468A.266 (1)(b):
- e) Benefit owners and operators of heavy-duty trucks, if the fleet of the owner or operator includes only one heavy-duty truck and the heavy-duty truck is registered in Multnomah, Clackamas or Washington County;
- f) Benefit small fleets other than as described in paragraph (e) of this subsection;
- g) Involve the retrofit of concrete mixer trucks or trucks that are used for the transportation aggregate; or
- h) Meet the criteria of any other preferences that the commission may establish by rule, if the department determines that the additional preferences are necessary to ensure that grant awards result in the reduction of emissions from diesel engines.

HB 2007 sets preference criteria for awarding grant funding and authorizes EQC to establish additional preferences by rule. This direction allows DEQ to prioritize and select projects that meets multiple policy goals by establishing additional award criteria.

The bill also establishes medium duty and heavy duty diesel vehicle deadlines after which certain older model, diesel-engines vehicles cannot be titled or registered in Clackamas, Multnomah and Washington counties, unless they meet retrofit requirements:

Jan. 1, 2023:

Publicly and privately owned medium- and heavy-duty trucks with an engine model year 1996 or older cannot be registered

Jan. 1, 2025:

Medium-duty trucks with an engine model year 2009 or older cannot be titled Heavy-duty trucks with an engine model year 2006 or older cannot be titled

Jan. 1, 2029:

Publicly and privately owned medium-duty trucks with an engine model year 2009 or older cannot be registered

Publicly owned heavy-duty trucks with an engine model year 2009 or older cannot be registered Privately owned heavy-duty trucks with an engine model year 2006 or older cannot be registered

The legislation allows a truck to be registered or titled after the phase out deadlines, if it is equipped with DEQ/EQC-certified retrofit technology. The legislation also exempts certain vehicle types from the phase out deadlines.

Vehicles subject to HB 2007 deadlines, including nonroad construction equipment subject to new state contracting standards, are a priority for retrofit, repower, and replacement with support from VW funds. DEQ will work to establish viable diesel emission reduction projects, funded in part with VW funds, among this group of equipment owners. While the current one-time revenue available will not be enough to help everyone who is directly impacted by diesel emissions it will provide significant support and a framework for potential future investments.

Oregon's VW Environmental Mitigation Plan

Current agency goals published in Oregon's VW Environmental Mitigation Plan⁶ include:

- Maximize benefits for vulnerable populations, e.g., low income, minority, elderly and youth;
- Prioritize pollution reductions in areas of the state with the highest emissions of nitrogen oxides and particulate matter from diesel engines; and
- Maximize pollution reduction cost effectiveness.

The plan provides guidance for the development of future grant allocations from the VW Environmental Mitigation Fund and it will be updated to reflect recent changes in statute and rule. Once DEQ updates Oregon's VW Plan accordingly the agency will be required to submit it to the VW Trustee for review and approval prior to requesting additional funding.

Key Issues

Based on policy requirements from the VW Environmental Mitigation Trust Agreement, DERA program, HB 2007, Oregon's VW Environmental Mitigation Plan, Oregon's air quality needs, and stakeholder priorities the Oregon DEQ proposes the following priorities for an expanded grant program:

- Reduce emissions from diesel engines in areas of the state with the highest diesel emissions density, highest vulnerable populations, and the greatest general population density.
- Mitigate the impacts on communities that have historically borne a disproportionate share of the adverse impacts of such emissions ^{7 8}
- Fully mitigate the total lifetime excess NOx emissions of the subject VW vehicles ⁹

Section 5.2.10: https://www.vwenvironmentalmitigationtrust.com/sites/default/files/2019-04/Modified%20State%20Trust%20Agreement 1.pdf

https://www.oregon.gov/deq/FilterDocs/VWmitigplan.pdf

https://www.vwenvironmentalmitigationtrust.com/sites/default/files/2019-04/Modified%20State%20Trust%20Agreement 1.pdf

⁶ Oregon's VW Environmental Mitigation Plan, Pg. 4: https://www.oregon.gov/deq/FilterDocs/VWmitigplan.pdf

⁷ VW Environmental Mitigation Trust Agreement,

⁸ Oregon's VW Environmental Mitigation Plan Goals, Pg. 4:

⁹ Environmental Mitigation Trust Agreement, Pg. 1:

- Ensure funds benefit vulnerable populations and are accessible to disadvantaged, minority, & women business enterprises 10 11
- Support projects that utilize Oregon's Clean Fuel Program ¹²
- Maximize public health benefits
- Rules must be consistent with VW Environmental Mitigation Trust Agreement
- Rules must be consistent with statute
- DEQ must disburse all funds by the deadline, Oct. 2nd, 2027.
- All sectors of diesel powered equipment will be eligible
- Leverage additional matching funds
- Ensure cost effectiveness

Oregon's expanded VW fund will adhere to all applicable requirements while seeking to minimize the burden of diesel emissions on vulnerable populations and employees of disadvantaged and small businesses. In order to maximize benefits for vulnerable populations and reduce pollution where it is most needed Oregon DEQ proposes prioritizing projects in strategic areas. Viable projects that will produce measureable benefits in areas where vulnerable populations face the elevated health risks from diesel pollution can be awarded priority during project selection to address this issue. The EPA maintains an Environmental Justice Screen (EJ Screen) mapping tool that will assist Oregon DEQ in determining the potential impact of proposed projects among vulnerable populations.

To ensure that rural, small, and Certification Office for Business Inclusion and Diversity (COBID) Certified businesses can utilize VW funds DEQ proposes making technical support available upon request, based on need. Technical support will help small businesses navigate the grant application process including identifying key information from diesel equipment, registering for Data Universal Numbering System (DUNS), the Federal System for Award Management (SAM) and meeting other regulatory requirements of the grant application and administration process.

To maximize the impact of available funding DEQ will seek synergies with other public and private partners who may be able to provide project funding in excess of allowable limits under the VW Environmental Mitigation Trust Agreement. An example of this type of partnership could include other state, local, or private funding sources such as Clean Fuels Program credits being used to fund fueling or charging infrastructure when converting diesel vehicles to alternate fueled or electric vehicles. As appropriate this option will be considered during program design and project awards.

All diesel equipment types operating in Oregon will be eligible for replacement projects under the VW fund. In addition to awarding preference for projects in strategic areas based on HB 2007 requirements, Oregon DEQ will consider the air quality impacts of different types of equipment and recommends criteria to promote cost effective projects among grant applicants.

Key Implementation Issues

DEQ proposes to move swiftly to establish rules, accept applications, and award grant funding. In addition to the deadline to obligate at least 80% of funding by Oct. 2nd, 2027, the Oregon legislature expects owners/operators of trucks impacted by HB 2007 engine phase-out deadlines

¹⁰ Oregon's VW Environmental Mitigation Plan Goals, Pg. 4: https://www.oregon.gov/deg/FilterDocs/VWmitigplan.pdf

¹¹ HB 2007 Section 2(3)(b): https://olis.leg.state.or.us/liz/2019R1/Downloads/MeasureDocument/HB2007/Enrolled HB 2007 Section 2(3)(d): https://olis.leg.state.or.us/liz/2019R1/Downloads/MeasureDocument/HB2007/Enrolled

to be able to access funds (either replace or retrofit) in advance of the initial deadline of Jan. 1st, 2023. DEQ's plan will make the first tranche of funding available in early 2021.

DEQ proposes to award approximately 1/5th of available funding during each of five consecutive calendar years to disburse the total of remaining funding beginning in 2021 and ending in 2025. This schedule will allow for certainty among diesel equipment owners regarding funding availability and will ease implementation, allowing for continuous processing of grant projects during the early years the VW Trust is in effect. Funding estimates are as follows:

Date Range	Activity	VW Fund Allocation	VW Funds Available
Oct. 2, 2017	VW Settlement	\$72.9M	\$72.9M
2017-2027	15% Admin.	(\$10.9M)	\$62M
Aug. 15, 2017	SB 1008	(\$18-22M)	\$40 - \$44M
Aug. 9, 2019	HB 2007	(Remaining VW Funds)	\$40 - \$44M
2021	Grant Availability #1	(\$8 - \$8.8M)	\$32 - \$35.2M
2022	Grant Availability #2	(\$8 - \$8.8M)	\$24 - \$26.4M
2023	Grant Availability #3	(\$8 - \$8.8M)	\$16 - \$17.6M
2024	Grant Availability #4	(\$8 - \$8.8M)	\$8 - \$8.8M
2025	Grant Availability #5	(\$8 - \$8.8M)	\$0
2026	Potential Grant Avail.	Based on remaining funds	
2027	Potential Grant Avail.	Based on remaining funds	

Eligible project categories will only include those authorized under the VW Trust and DERA programs. DEQ expects funding to be oversubscribed and will select those projects that meet the most preference criteria. The VW Trust and DERA programs include established funding limits based on diesel equipment type, ownership, and emission reduction project type. All projects will be evaluated on an individual basis to determine the appropriate reimbursement amount available.

Next Steps

DEQ is planning to engage the public and stakeholders in a rulemaking process throughout 2020 and launch the new grant program in early 2021. The rulemaking process will provide diesel equipment owners and operators, community groups and affected private citizens the opportunity to provide input on the details of the grant program.

DEQ is planning to make funding available from the grant program a full two years prior to the January 1, 2023 deadline for phasing out vehicles powered by diesel engines that are model year 1996 or older as specified in HB 2007. Each project that receives funding will result in lower diesel emissions, as required by the Environmental Mitigation Fund. DEQ will continue to fund projects until all statutory requirements are met and all the funds are spent.