



## **Response to Public Comments Received During Development of Ohio's Beneficiary Mitigation Plan**

Ohio EPA is committed to an open, robust and transparent process to develop and implement Ohio's Beneficiary Mitigation Plan. The agency held two separate public comment periods, one before development of a draft Plan, and another in 2017-2018 after release of the draft. These are described more fully below. Ohio EPA reached out to numerous stakeholders, supplier representatives and diesel fleet owners to determine the level of interest from public and private sector entities in applying for funding and participating in the various Eligible Mitigation Actions. Ohio EPA also consulted other states and US EPA to develop consensus interpretations of the settlement language. Between September 2016 and May 2018, Ohio EPA gave 31 public presentations about the program, reaching an estimated audience of more than 1,500 people. The Agency also held more than 100 meetings and conference calls with stakeholders, including previous applicants to Ohio EPA's three other diesel emission reduction grant programs, fuel and technology vendors, environmental groups, trade associations, municipalities and local government associations, regional planning organizations, public utilities, ports and airports, Clean Fuels Ohio (the state's U.S. Department of Energy Clean Cities affiliate), the Ohio Development Services Agency, Ohio Department of Transportation, Public Utilities Commission of Ohio, Ohio Turnpike, and U.S. EPA's Midwest Clean Diesel Initiative. To provide transparency and accountability, Ohio EPA posts and regularly updates information on its [VW website](#), first created in November, 2016. The agency also updates information about Ohio on national VW settlement clearinghouses such as those of the [National Association of Clean Air Agencies](#) and the [EV Hub](#). Regular e-mailings are sent to an interested party mailing list of Ohio's four diesel grant programs, that currently has more than 4,300 names. Copies of the draft and final Beneficiary Mitigation Plan may also be requested by calling Ohio EPA at (614) 644-2873.

### **Informal Public Comment Period**

Based on air quality (Ohio counties of concern due to ozone levels), historical levels of diesel emissions, the locations where the most VW vehicles equipped with defeat devices were registered in Ohio, and U.S. EPA's [Environmental Justice Screening and Mapping Tool](#), Ohio EPA created a map proposing 26 counties as either first or second priority for Ohio's allocated VW funds to be awarded to eligible projects to reduce diesel emissions. In November 2016, Ohio EPA sent an initial VW announcement to 20,355 addresses on the Agency's combined e-mailing lists, inviting comments on the map and indications of interest in the Eligible Mitigation Actions allowed under the VW Settlement. In response to this request, the Agency received 201 written comments. School bus replacements were the most requested use of the funding, followed by transit bus replacements and electric vehicle charging stations for light duty vehicles. Comments included indications of support for each of the allowable uses, and all the VW-eligible alternative fuel sources, including compressed natural gas, liquid natural gas, propane, and electric.

## **Draft Plan Development and Formal Public Comment Period**

Ohio EPA continued to track comments received throughout 2017 and 2018. The agency offered a **formal 60-day public comment period** when the state's draft Beneficiary Mitigation Plan was released on December 7, 2017. Regional public information sessions offered in Columbus January 11, Cleveland January 18 and Cincinnati January 22, 2018 were attended by a total of 86 people. Ohio EPA received 85 written responses that are now posted on the [VW website](#). A March 21, 2018 webinar on plans for implementation of the plan drew 45 attendees. The Agency offered a briefing for members of the Ohio General Assembly on May 15, 2018. Comments were received in support of, and in opposition to, all available fuel and technology options. Some commenters advocated uses of the funds that are not eligible under the VW settlement. Ohio EPA responses are organized below according to issue.

### **Proposed Priority Counties**

As might be expected, comments from within the first priority counties supported their proposed designation, and comments from within the second priority counties urged that all proposed priority counties receive equal treatment in disbursing funds. Several commenters from southwest Ohio requested assurances of regional equity in the distribution of funds. Other comments advocated for the inclusion of 14 additional counties, or the earmarking of 10% of the VW funds to go to projects in rural counties. Two commenters cited specific emission sources located within their borders and three provided data on asthma or air quality, including emissions of pollutants other than NO<sub>x</sub>, which is the primary pollutant of concern cited in the VW Settlement. Ohio EPA considered these comments carefully.

The VW settlement lays out four criteria states must consider in determining where to fund Eligible Mitigation Actions:

- areas of concern due to NO<sub>x</sub> pollution and ozone levels;
- areas that have borne a disproportionate share of the burden of that pollution;
- areas where vehicles equipped with the illegal defeat devices were located; and
- the location of concentrated sources of this pollution, such as ports, rail yards and distribution centers.

Ohio EPA based its initial proposal of first and second priority counties based on these four criteria, as outlined in the draft Beneficiary Mitigation Plan (See Section III. C.), with primary consideration given to those counties with air quality issues. The counties identified as first-priority on the Ohio map initially proposed were those counties that were expected to be designated by U.S. EPA as non-attainment for the 2015 ozone standard. Specifically, these counties exceed the National Ambient Air Quality Standard (NAAQS) for ozone, which is 0.070 ppm.

The Beneficiary Mitigation Plan is designed to evaluate projects that will reduce nitrogen oxides (NO<sub>x</sub>) emissions. NO<sub>x</sub>, along with volatile organic compounds, are precursor pollutants in the formation of ozone. A reduction in NO<sub>x</sub> emissions in these priority counties will help these counties reach attainment status. Ohio EPA is required by Section 110 of the Clean Air Act to evaluate emission control strategies for such non-attainment counties, to bring them into attainment status with the NAAQS. Concentrating available funds on emission reduction projects with measurable benefits in these areas will be an important part of this strategy.

In March 2008, U.S. EPA finalized a new eight-hour ozone standard of 75 ppb. When Ohio's draft Beneficiary Mitigation Plan was circulated in December 2017, the entire state was still in full attainment of this standard. However, U.S. EPA tightened the standard to 70 ppb in Oct. 2015. U.S. EPA released the 2015 ozone standard designations on April 30, 2018. As expected, U.S. EPA is now designating fifteen Ohio counties as nonattainment areas for ozone. As a result, additional strategies will be necessary to achieve further emission reductions in these Ohio priority counties. Two of these counties (Cuyahoga and Lorain) are also currently classified as nonattainment for the 2012 annual standard of 12.0 µg/m<sup>3</sup> for fine particulates (PM<sub>2.5</sub>). Improving air quality in these fifteen nonattainment counties to meet federal air quality standards under the Clean Air Act is the overriding concern considered by Ohio EPA in prioritizing where funded Mitigation Actions under this plan should be located. Because the new designations include Portage County as a nonattainment area for ozone, it has been changed from a second priority to a first priority county in the final Beneficiary Mitigation Plan. That is the only change to the map.

Some commenters requested clarification as to how Ohio EPA will compare applications for projects from first and second priority counties. The VW program will use the same review and scoring process that has worked very well for the past ten years in Ohio's Diesel Emission Reduction Grant program, to provide a good balance geographically and between sectors. In each grant cycle for on- and off-road vehicle projects, Ohio EPA will use U.S. EPA's *Diesel Emissions Quantifier* tool to rank all applications submitted based on the cost effectiveness of the NOx emission reductions likely to be generated. Within each category, Ohio EPA will consider the most cost-effective applications from first priority counties first, and then consider the proposals that ranked very closely or the same in terms of cost effectiveness, selecting projects based on the amount of funding available in each category that grant cycle, and the distribution of funding among different regions of the state. A very cost-effective proposal likely to result in significant emission reductions in a secondary priority county would be a better investment than some other projects in a first priority county that provide far less emission reduction benefits.

#### **Match requirements for public and private sector fleets**

Although the VW settlement allowed states to fund up to 100% of the cost of non-government fleet projects, Ohio and many other states are requiring at least some level of local match from all applicants, to spread the available funds as far as possible. Ohio's draft plan proposed to require a local cost share of at least 25% on all funded projects, or a higher local cost share where the maximum funding level spelled out in the Trust agreement requires it. Applicants will also be strongly encouraged to provide a local match greater than 25% to improve the competitiveness of their applications. Commenters were roughly equally divided between those who felt that government and non-government fleets should be funded at the same rate, and those who wanted a larger share or all the funding to be awarded to government fleets. No change was made in the final plan.

#### **Comments on particular fuels**

Many comments were received from advocates of compressed, liquid and renewable natural gas, propane, new clean diesel/ultra-low sulfur diesel, battery electric and hydrogen fuel cells as the best or only solution that should be funded, based on different data and assumptions. As stated in the draft plan and affirmed in the final plan, Ohio EPA believes that fleet managers make decisions about what fuel to use based on a multitude of factors including the price and local availability of fuels and fueling

infrastructure, vehicle and equipment warranties, tax and financial incentives, and training and certification of employees. Ohio EPA believes that fleet managers are best qualified to make those decisions. Ohio's Beneficiary Mitigation Plan seeks to strike a balance that recognizes the mix of available fuel and technology options competing for Ohio customers in the marketplace.

### **Comments on allocating 15% for charging/fueling infrastructure for light duty Zero Emission Vehicles (ZEVs)**

Most commenters expressed strong support for this allocation, with many providing detailed technical suggestions that will be very helpful as Ohio EPA moves to implement this component of the plan. Language in the final plan has been changed to clarify that the funds will be used for both Level 2 and DC fast charging stations, based on local site assessments. Several commenters expressed support for charging stations in workplaces and multi-unit dwellings. Ohio EPA acknowledges this as a statewide need but believes that the VW settlement dollars are better used to support charging stations that are publicly available, in high-traffic areas and locations that are served by more than a single retailer. Ohio EPA will consult local communities, metropolitan planning organizations, electric utilities and other stakeholders during the summer and fall of 2018 to determine priority locations, and avoid duplication of charging stations being installed by utilities, municipalities and *Electrify America* with other funds from the VW Settlement. For DC fast charging stations, priority will be accorded to installation in areas where Phase 3 electric service is already available. Another funding priority will be to fill in gaps along Ohio's major highway corridors where transportation legislation under the FAST ACT is establishing a national network of alternative fueling and charging infrastructure. Included in the Plan are the March 2018 maps of designated Ohio Alternative Fuel Corridors for electric vehicles and hydrogen fuel cells, both of which are eligible under this option.

Once the 2018 outreach to stakeholders has resulted in a prioritized list of locations in the priority counties, Ohio EPA will pre-qualify installers of charging and fueling stations through a competitively bid state term contract. Ohio EPA expects to begin seeking bids from those contractors for installations by region in 2019. Ohio EPA is reviewing the siting processes used in other states, like Virginia and Colorado, to incorporate lessons learned.

Some commenters advocated distributing funding in this category through rebates, direct allocations to municipalities, or on a first come, first served basis, while others expressed support for competitive bidding. The VW settlement language requires state beneficiaries of the Trust to certify that all vendors were selected in accordance with state public contracting laws.

Some commenters opposed any delay in implementing the installation of EV charging stations. Ohio EPA developed this schedule to allow:

- reasonable stakeholder input into site selection by region;
- analysis of the appropriateness of suggested locations in terms of availability, traffic and infrastructure;
- updated information on where other actors are installing stations; and
- appropriate vetting of installation contractors.

Several comments requested that Ohio EPA fund more charging equipment for fleets that apply for electric heavy-duty vehicles and equipment in the other eligible grant categories. Given the high cost,

long lead times and complexity of site-specific projects, Ohio EPA intends to focus the available funding on vehicle and engine replacements that will more quickly reduce emissions.

### **Comments on truck fleets**

Many commenters requested that a larger share of the funding be allocated to truck fleets. Ohio EPA reallocated funds originally proposed for shore power, to increase the amount of funding available for class 4-8 local freight trucks and shuttle buses to \$10 million in the final Beneficiary Mitigation Plan. We have been able to achieve significant emission reductions with truck repower and replacement projects funded through Ohio's Diesel Emission Reduction Grant and Alternative Fuel Vehicle Grant programs. Ohio EPA hopes to continue to fund truck projects with all available funding opportunities.

Commenters also requested clarification of the term "local freight" used in the VW settlement, and whether government-owned truck fleets would be eligible to apply for grants. Ohio EPA will accept applications from local government fleets for replacements and repowers of Class 4-7 Local Freight Trucks with a Gross Vehicle Weight Rating (GVWR) between 14,001 and 33,000 pounds, and Class 8 Local Freight and Port Drayage Trucks with a GVWR greater than 33,000 pounds. These categories include many types of vehicles operated by local governments, such as delivery, utility, refuse collection and salt/plow/dump trucks. Ohio EPA will consider applications for repower or replacement of emergency vehicles such as fire and heavy rescue trucks that can demonstrate they travel enough miles or operate enough hours annually to be cost-effective in terms of emission reductions.

### **Comments on requirement to scrap old vehicles being replaced or repowered**

One commenter requested that the plan allow more options like vehicle exchanges, and the replacement of old natural gas vehicles with new natural gas vehicles. The requirement that old vehicles and engines be scrapped is clear in every category of Eligible Mitigation Action in Appendix D-2 of the VW State Beneficiary Trust Agreement. Ohio EPA believes the clear intent of the Trust is to provide states the opportunity to mitigate pollution caused by diesel vehicles that were equipped with defeat devices. Ohio EPA will consider proposals for the replacement or repower of diesel on-road vehicles that result in significant emission benefits. The Trust agreement does allow for the replacement of some other categories of off-road equipment such as gasoline.

### **Comments on the use of the Diesel Emission Quantifier (DEQ) to estimate emission reductions**

Several commenters felt that the DEQ underestimates the emission reduction benefits of alternative fuel projects, advocating use of the "Alternative Fuel Life-Cycle Environment and Economic Transportation" AFLEET or HDVEC tools instead.

AFLEET is a comprehensive tool designed to help fleet managers estimate petroleum use, greenhouse gas emissions, air pollutant emissions, and the lifetime cost of ownership of light-duty and heavy-duty vehicles. This is beyond the scope of the Beneficiary Mitigation Plan, which is to evaluate projects that will reduce NOx emissions. AFLEET is a very cumbersome tool for estimating emissions from individual vehicles, and to be used properly, requires more complex input data than most Ohio grant applicants would be able to easily provide.

U.S. EPA's DEQ has been the primary tool used by Ohio EPA and U.S. EPA for two federally funded programs: U.S. EPA grants under the Diesel Emissions Reduction Act (DERA), and Federal Highway

Administration funding under the Congestion Mitigation and Air Quality Improvement (CMAQ) program that supports the Diesel Emission Reduction Grant (DERG) program administered jointly by the Ohio Department of Transportation and Ohio EPA.

Earlier versions of the DEQ did indeed underrepresent the emission benefits of alternate fuel vehicles, but U.S. EPA has made several changes to the DEQ in recent years to address this and other issues pointed out by users including Ohio EPA. In estimating emissions for alternative fuel project applications to Ohio's DERG and VW grant programs, Ohio EPA inputs manual calculations based on published data from engine certifications issued by either U.S. EPA or the California Air Resources Board to ensure that emissions are estimated properly, and applications are reviewed fairly. Ohio EPA will continue to follow updates to the DEQ and AFLEET tools and other tools under development such as the Argonne National Laboratory's HDVEC tool.

As outlined in the Beneficiary Mitigation Plan, grant applications will be scored based upon the "cost-effectiveness" of a given project [i.e., project funding amount request (\$)/NOx emission reductions achieved, tons/year].

All proposed projects require the applicant to provide a minimum match in funding for a given project [see appendix D-2 of the draft Beneficiary Mitigation Plan]. Applicants are encouraged to consider offering a larger local match, to increase the cost-effectiveness of their project, and increase the competitiveness of their application.

### **General Comments**

Ohio EPA was asked to define "time spent in the region" because travel time data is hard to collect for some fleets. Ohio EPA has clarified this in the grant application guidelines and form. Applicants are asked to certify that more than 75% of the miles driven by existing on-road vehicles during the most recent two years were in priority counties, and that 75% of the operating hours of existing off-road equipment during the most recent two years were in Ohio priority counties. Grant applicants are asked to certify, and grant recipients will be required to demonstrate, that 75% of the annual miles driven by new on-road vehicles and engines, or 75% of the annual operating hours of new off-road equipment and engines, will be within Ohio priority counties.

### **Comments rejected as ineligible or beyond the scope of the program**

Commenters offered several suggestions that Ohio EPA interprets as ineligible under the terms of the VW State Beneficiary Trust Agreement, or beyond the scope of Ohio EPA's authority under this program. These included requests to support idle reduction equipment and retrofit emission control devices such as diesel particulate filters and diesel oxidation catalysts. Ohio EPA has funded these technologies with our other grant programs, but we are now seeing much greater demand from grant applicants for replacement vehicles and engines. Idling equipment and retrofit devices that are eligible under U.S. EPA's DERA program and certified by U.S. EPA or the California Air Resources Board could be funded by states using the so-called DERA Option for VW funds. Ohio EPA used this rather cumbersome option to support the tug boat replacement project described in the Plan and will only consider that route for projects that can achieve extremely large emission reductions. Fleet managers interested in idle reduction or retrofit equipment are encouraged to apply instead for U.S. EPA DERA or Ohio EPA DERG grants, both of which are available in a larger number of Ohio counties.

Other suggestions rejected by Ohio EPA as ineligible under the VW program were for diesel fuel additives and fueling stations, lift trucks operating in warehouses, and stationary electric generators as airport ground support equipment.

Three suggestions rejected as clearly beyond the scope of Ohio EPA's authority were to:

- Require all new apartments and condos to have installed EV charging
- Encourage casinos to give away charging units
- Encourage non-Tesla drivers selling used and new EVs/PHEVs to advertise in newspapers and on television
- Train auto dealer sales staff in EVs

Comments and questions about Ohio's Beneficiary Mitigation Plan and new Diesel Mitigation Trust Fund grant program may be directed to Ohio EPA's Office of Environmental Education, at [derg@epa.ohio.gov](mailto:derg@epa.ohio.gov) or (614) 644-2873.