



VW DIESEL SETTLEMENT – CRYSTAL FLASH CUSTOMER OPPORTUNITIES

The recent settlement between Volkswagen USA and the US Department of Justice for designing deceptive software into the operating system of VW diesel engine vehicles sold in the United States provides a great opportunity to help upgrade diesel vehicles. Crystal Flash's Autogas program is perfectly positioned to access approximately \$6 million a year for the next ten years to convert diesel engine fleets to propane technologies. This summary provides a general overview of the opportunities.

BACKGROUND

Volkswagen Group of America (VW) admitted publicly in 2015 that it had secretly and deliberately installed software "defeat devices" designed to cheat state emissions tests. Nearly 590,000 model year 2009 to 2016 Volkswagen, Audi and Porsche vehicles with 2.0- and 3.0-liter diesel engines equipped with "defeat devices" were sold in the State of Michigan. The major excess pollutant at issue in this case are the oxides of nitrogen (NOx) which is considered a serious health concern by the US EPA.

Responding to complaints filed by the U.S. Department of Justice and the attorneys general of several states, courts have approved a series of settlements resolving some aspects of the case. To date, these settlements require VW to:

- Offer buy-backs, early lease terminations or emissions control modifications to the owners or lessees of at least 85 percent of all affected vehicles.
- Invest \$2 billion to promote the use of zero emission vehicles (ZEVs) and related infrastructure across the country.
- Establish a \$3 billion environmental mitigation trust to fund national and state projects aimed at offsetting the excess nitrogen oxide (NOx) emissions caused by VW's actions.

The Volkswagen Environmental Mitigation Trust Fund will financially support actions that reduce Nitrogen Oxide (NOx) emissions in the United States. The amount of funds distributed will vary by state or territory, depending on the number of non-compliant Volkswagen vehicles that were registered there.

In response to the US District Court Case, approximately \$60.3 million has been allocated to Michigan as part of the settlement funds. *Michigan has submitted its Draft Mitigation Plan on schedule and is currently awaiting final notification of approval.*

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MICHIGAN'S FUNDING GOALS

THE FIRST OPPORTUNITY

According to the Propane Education and Research Council, states should consider including Autogas school buses in their plans to utilize the Volkswagen settlement funds. School districts that have opportunities to purchase new Autogas school buses reduce the amount of harmful diesel emissions — which are known aggravators of asthma and other breathing issues — around their students. Depending on a school district's situation, it can significantly reduce NOx emissions with Autogas school buses. Schools with 2007 and older diesel engines could reduce NOx emissions by up to 92 percent by converting to propane fuel.

MICHIGAN'S PLAN

The MDEQ is proposing to allocate its Mitigation Trust Fund dollars in four categories designed to implement projects that reduce NOx and PM_{2.5}. The types of projects included with its proposal were considered by the State as durable, sustainable solutions for the long-term benefit of communities. Project outcomes will be quantified with the U.S. EPA Diesel Emissions Quantifier (<https://www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq>, a government sponsored emissions calculator). Additionally, the MDEQ has proposed the following categories of eligibility of interest to Crystal Flash customers:

Category 1:

- Diesel ERA type projects: Approximately 72% of funds (\$43,455,000).
 - Vehicle replacement: Class 8 local freight trucks and port drayage (eligible large trucks).
 - School bus replacement: Class 4-8.
 - Freight switcher replacement.
 - Ferry and tug boat engine replacement.
 - Vehicle replacement: Class 4-7 local freight trucks and refuse trucks (eligible medium trucks).
 - Fork lift replacement.

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Category 2:

- State Diesel Emission Reduction Act (DERA) match: Approximately 4% of funds (\$2,373,000), which covers large stationary industrial engines, as well as vehicle, and equipment replacements.

Category 3:

- New light duty zero emissions vehicle supply equipment: Approximately 14% of funds (\$8,472,000).
 - Level 1 / Level 2 or fast charging equipment.

HOW THE MDEQ VW MITIGATION PLAN WILL WORK

A national organization called the Wellington Trust is overseeing all state mitigation programs and will develop funding guidelines. They are reviewing Michigan's Draft Plan submitted earlier this year and a decision is expected shortly.

Michigan plans to keep existing funding through US EPA DERA allocations separate from the VW Settlement Funding and therefore will operate them as two separate programs.

According to Ms. Swartz, the MDEQ's lead on the VW funding, Michigan will not approve any funding projects that seek 100 percent funding from the VW Mitigation Plan for a project, all funding submittals will require a financial match component. Generally, the greater the matching funds and the larger the reduction of NOx and PM_{2.5} the better the odds of funding the proposal will be for the applicant. The State is anticipating that the formal program will launch early in 2019, they are considering the benefits of running a pilot program in the fall of 2018 exclusively for school buses.

All funding approved from the VW settlement funding will be managed by the MDEQ using their existing contract management and oversight process. This usually means the State contracts will be a "cost reimbursement" process, where payments from the State are reimbursed to the applicant after funds have been spent successfully on eligible tasks. Once approved quarterly reporting will also be required.

If your diesel fleet is at the end of its useful life cycle, now is a great time to contact Brad Morrill at 616-365-3252 or bradm@crystalflash.com for a Crystal Flash VW potential funding opportunity assessment to successfully obtain vehicle upgrade funding.

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