

The Diesel Emissions Reduction Act Coalition

August 5, 2016

John Cruden, Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington D.C. 20044

Dear Assistant Attorney General Cruden:

We are submitting comments on behalf of a broad coalition that shares several specific concerns regarding the Mitigation Trust Fund (“MTF”), Appendix D of the Partial Consent Decree lodged in *In Re: Volkswagen “Clean Diesel” Marketing, Sales Practices, and Products Liability Litigation*, Case No: MDL 2672 CRB (the “Decree”). The Decree itself emphasizes that its purpose is to “fully mitigate the total, lifetime excess NOx emissions” from the vehicles at issue.<sup>1</sup> Our comments set out several small changes to the Decree that would likely increase the NOx reduction achieved by the MTF to a significant degree, assisting the parties in reaching the Decree’s goal.

Our coalition has worked collaboratively for over a decade to support the efforts of the Environmental Protection Agency (“EPA”) to implement the Diesel Emissions Reduction Act of 2005 (“DERA”). DERA provides financial assistance to vehicle and vessel owners to retrofit or replace existing vehicles, vessels, or equipment with the latest technology to reduce diesel emissions, including NOx, from existing diesel engines. The program requires annual appropriations from Congress. Our coalition has successfully advocated for these annual appropriations, which have amounted to over \$650 million since the program was launched.

The coalition has also provided technical advice to EPA on the means to administer the incentive program effectively. DERA has proven to be one of the most successful and cost-effective EPA programs. Since it was launched, it has achieved 335,200 tons of NOx reduction with a payback of \$5 to \$21 of environmental, health, and economic benefits for every dollar of federal funds expended.<sup>2</sup>

The coalition respectfully suggests the following changes in the administration of the MTF, with the purpose of achieving *even more* significant NOx reductions pursuant to the principal goal of the Decree, and thereby mitigating the adverse effect on the environment associated with VW’s use of defeat devices.

---

<sup>1</sup> Decree at page 5, paragraph 7

<sup>2</sup> Third Report to Congress: Highlights from the Diesel Emission Reduction Program, EPA-420-R-16-004 February 2016 at page 3. See also Diesel Engine Grants Program Nets Major Air, Public Health Benefits, April 29, 2016 at <https://www.epa.gov/newsreleases/epa-report-diesel-engine-grants-program-nets-major-air-public-health-benefits-0>.

**1. Funding Under The EMT Should Be Technology Neutral Applying the Same Percentage Subsidy Across All Comparable Technologies.**

To achieve a higher level of NOx emissions reduction, Appendix D should be modified so that the percentage subsidy levels are the same across all technologies. As presently drafted, the Decree provides a different percentage subsidy for different types of technology. For example, the purchase of a replacement for a class 4-8 school bus model 2006 and older could include a new diesel vehicle that is eligible for a 25% subsidy or an all-electric vehicle that is eligible for a 75% subsidy. Because all-electric vehicles are two to four times more expensive than diesel vehicles and the NOx emission reduction is almost the same, the cost per ton of NOx reduction on an all-electric vehicle is far higher than it is for a clean diesel vehicle.<sup>3</sup> In the case of a drayage truck analysis done by the California Air Resources Board, all-electric vehicles are twice as expensive as diesel vehicles and replacing a pre-2002 diesel with a new diesel achieves 95% of the NOx reduction achievable with an all-electric replacement. As such, the cost per ton of NOx reduced by replacing a drayage truck with an all-electric vehicle at a 75% subsidy is 5 to 6 times higher than a diesel replacement at a 25% subsidy.<sup>4</sup> This means that for any given level of total funding available to fund vehicle replacement, far less NOx reduction will be achieved with investment in all-electric vehicles than would be achieved with investment in clean diesel vehicles and equipment.

Another example is based on an analysis done by the U.S. Department of Transportation (“DOT”), which shows that widely available clean diesel technology can eliminate a ton of NOx emissions for under \$20,000 per ton. In contrast, electric technologies can reduce a ton of NOx emissions for a cost in the range of \$700,000 to \$1.5 million per ton.<sup>5</sup> So theoretically, if the expenditure of the \$2.7 billion in the Decree for the purchase of NOx reduction technology is spent on clean diesel technology, 135,000 tons of NOx can be reduced versus 1,800 to 3,857 tons with the purchase of all-electric technology, including infrastructure. Admittedly, this is a stark example, but it demonstrates that at the extreme a plan that incentivizes investment in all-electric technology over investment in clean diesel technology would be sub-optimal in terms of NOx reduction and its beneficial impact on the environment and on human health.

Given these examples, a better approach is to maintain technology neutrality by providing the same percentage subsidy for all technology solutions. The idea of

---

<sup>3</sup> [http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/reference/cost\\_effectiveness\\_tables/](http://www.fhwa.dot.gov/environment/air_quality/cmaq/reference/cost_effectiveness_tables/)

<sup>4</sup> This calculation is based upon a draft analysis published by CARB entitled Technology Assessment: Medium-and-Heavy-Duty Battery Electric Trucks and Buses dated October 2015. The calculation makes the following assumptions: electric drayage trucks with a range of 100 miles per day (35,000 per year), a cost at \$208,000, zero NOx emissions, and 2.3 kWh per mile of energy on average to move the vehicle. The new diesel truck is similar except it costs \$108,000 and emits 0.2 g/bhp-hr NOx. The replaced diesel truck is model year 1996, emits 4.8 g/bhp-hr of NOx, and has 5 years remaining life.

<sup>5</sup> [http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/reference/cost\\_effectiveness\\_tables/](http://www.fhwa.dot.gov/environment/air_quality/cmaq/reference/cost_effectiveness_tables/)

technology neutrality has been followed by EPA in many of its mobile source regulations. This small change in approach has the potential of achieving a far higher level of NOx reduction than would otherwise be the case under the Decree as written.

The coalition understands that there may be policy goals other than NOx reduction that the parties want to achieve by incentivizing the purchase of all-electric vehicles. But it should be noted that even after making the MTF subsidy technology neutral, the Decree will still provide an enormous investment in electric vehicle technology. The Decree provides for \$2 billion of investment over a 10-year period to support increased use of technology for Zero Emissions Vehicle (“ZEV”).<sup>6</sup> By making the MTF technology neutral and thus increasing NOx reduction, the Decree will promote three goals: greater NOx reduction, the commensurate improvement in health, and the longer term development of ZEV.

## **2. Funding Under the Trust Should Be the Same for Both Public and Private Entities.**

A second simple change that would achieve greater reduction of NOx is to make the MTF provider neutral -- not distinguishing between public entities (such as local governments) and private entities. The subsidy, regardless of its level, should be the same percentage subsidy for both private and government entities.

As drafted, the Decree provides much greater subsidies for governments than for private entities. It provides a 100% subsidy to governments for repowering or replacing a government-owned vehicle, while the private sector is only eligible for subsidies ranging from 40% for repowering diesel and alternative fuel vehicles, 25% for the purchase of a new diesel or alternative fuel vehicle, and 75% for repowering or purchasing an all-electric vehicle. We support the language in the Decree that would treat private school bus companies under contract with local school districts the same as government entities. This is a step toward applicant neutrality, but we feel the Decree should go further. Perhaps the MTF should allow other private companies under contract to governmental entities to be treated the same, as well. There is no sound environmental basis for a huge difference between the subsidy for governments versus the private sector. The purchase of a clean vehicle by the private sector has the same environmental benefit as the purchase of the same vehicle by a governmental entity so why give government a higher level of subsidy? This is one of the reasons for treating private school bus companies under contract with local school districts the same as government entities. A school bus owned by a private company has the same environmental benefit as a school bus owned by a local government.

A 100% subsidy dilutes the environmental impact of the Decree because it will result in the overall purchase of fewer clean vehicles and equipment than would

---

<sup>6</sup> Decree at page 4, Para. 6 and Appendix C

otherwise be the case. The result is a much lower level of NOx reduction for any given level of funding made available. A 25% subsidy provided to the private sector for the purchase of a clean vehicle will enable the purchase of four clean vehicles with the same amount of funds that would be used by a government to purchase one vehicle with a 100% subsidy. Equalizing the subsidy will result in four times the level of NOx reduction.

A 100% subsidy will also give governments a perverse incentive to purchase new vehicles without regard to cost. By reducing the government subsidy to a lower amount, one equal to the subsidy available to private entities, government decision-makers would appropriately have to evaluate which technology provides the most cost-effective solution to meet their needs. A subsidy that is less than 100% will require governments to evaluate which technology will provide the most cost-effective reduction of NOx, with the result that the MTF can achieve a higher level of overall NOx emissions.

**3. Decisions on What Competing Projects to Fund Should Be Made On the Relative Cost Effectiveness of the Technology Proposed for Use.**

The question on how competing projects will be evaluated by the Trustee is not addressed in the Decree. The coalition suggests that relative cost effectiveness for NOx reduction be the primary standard for such evaluation. As has already been demonstrated above, using the most cost effective technologies results in the highest level of NOx reduction for a given level of total funds made available to invest in NOx reduction technologies.

**4. The MTF Should Include a Preference for Projects That Would Not Otherwise Be Funded.**

The MTF Trustees should be required, in approving projects for funding, to evaluate whether those projects would be funded even in the absence of funding from the MTF. For example, some fleet owners renew their fleets according to a pre-determined schedule. Funding these fleet purchases will not add any environmental benefit above that which would have been achieved without a subsidy. However, we believe the benchmark for the age of the vehicles to be replaced should be model year 2009 and older as those vehicles do not have the most current emission control technology.

**5. Some Portion of Funds should be to Concentrate Grant Funding in Areas with the Highest Levels of Nonattainment.**

Increased NOx emissions raise concerns about public health, especially as they relate to the occurrence of asthma. While it is important to focus on the reduction of NOx going forward, the health concerns related to past NOx emissions should also be addressed. One way to address health issues is to favor geographic areas with the highest nonattainment for ground-level ozone. Thus, we propose that the

MTF state that preference will be given to projects that reduce ozone by reducing NOx emissions, a precursor to ozone, in the areas of the highest nonattainment for ozone.

**6. States Should Be Permitted to Use The DERA Program to Administer Their Funds.**

In the DERA program, there already exists a widely praised and extremely successful mechanism for providing funding to incentivize equipment and vehicle owners to install retrofit technologies on existing heavy duty diesel vehicles and engines, or to replace engines and equipment, thus reducing emissions by as much as 90 percent. Since implementation, the DERA program has become one of the most cost-effective federal clean air programs. EPA has estimated that every \$1 in federal DERA assistance is met with another \$3 in non-federal matching funds, including significant investments from the private sector, and generates \$5 to \$21 in health and economic benefits. EPA's most recent estimates indicate that the program has upgraded nearly 73,000 vehicles or pieces of equipment, and saved over 450 million gallons of fuel. EPA also estimates that total lifetime emission reductions achieved through DERA funding are 335,200 tons of NOx and 14,700 of PM. These reductions have created up to \$12.6 billion of health benefits. Further, DERA benefits each state because 30 percent of the funding goes to support state programs.<sup>7</sup>

Given that we already have in DERA an existing program that has been highly successful in incentivizing technologies to reduce NOx emissions, the establishment of a new Trust, and new programs for each state, to do essentially the same thing is unnecessary and inefficient. To the extent each state wishes, it should be able to use the DERA program to distribute the funds to the extent permitted by law.<sup>8</sup>

At the very least, as the goal of the Decree is to achieve additional NOx emissions, it is important to ensure that the MTF is not considered as a replacement of the DERA program. If the establishment of the MTF undermines the DERA program, that portion of the NOx emission reductions that is being achieved today will be lost.

**7. States Should Maintain Current Funding Levels for their Existing Diesel Emission Reduction Programs.**

Many states have exemplary programs to address diesel emissions. Texas and California are but two examples of mature state programs that provide funding to accelerate the acceptance of new, cleaner vehicles and technologies that help to

---

<sup>7</sup> Third Report to Congress: Highlights from the Diesel Emission Reduction Program, EPA-420-R-16-004 February 2016 at pages 3 - 5.

<sup>8</sup> See 42 U.S.C. § 16139

The Diesel Emissions Reduction Act Coalition

reduce mobile source emissions. States should be required to make a commitment to maintain their existing programs in order to receive the funding under the Decree. If states were allowed to reduce their current funding, the VW settlement funds would not result in a net reduction in NOx emissions.

Thank you for considering our comments.

Sincerely,

**American Trucking Associations' – Associated General Contractors of America  
Blue Bird – Clean Air Task Force – Corning Incorporated  
Cummins Inc. – Diesel Technology Forum – Emissions Control Technology Association  
Manufacturers of Emission Controls Association  
National Association of State Directors of Pupil Transportation Services  
National School Transportation Association – Saltchuk  
Truck and Engine Manufacturers Association – United Motorcoach Association**

cc: Volkswagen Case Team  
Air Enforcement Division  
U.S. EPA  
1200 Pennsylvania Ave., NW  
Mail Code 2242A  
Washington, DC 20460  
[VW\\_settlement@epa.gov](mailto:VW_settlement@epa.gov)