



December 2, 2016

TO: Members, Subcommittee on Oversight and Investigations

FROM: Committee Majority Staff

RE: Hearing on “Volkswagen’s Emissions Cheating Settlement: Questions Concerning ZEV Program Implementation”

I. INTRODUCTION

On Tuesday, December 6, 2016, at 10:00 a.m. in 2322 Rayburn House Office Building, the Subcommittee on Oversight and Investigations will hold a hearing entitled “Volkswagen’s Emissions Cheating Settlement: Questions Concerning ZEV Program Implementation.” The hearing will examine questions concerning implementation of the two supplemental agreements appended to the partial consent decree—one to facilitate investments in infrastructure for Zero Emission Vehicles (ZEVs), and one to fund projects to mitigate emissions of nitrous oxides—with particular emphasis on the Environmental Protection Agency’s (EPA) role and schedule for implementing the settlement’s terms related to the ZEV Investment Commitment.

II. WITNESSES

- Cynthia Giles, Assistant Administrator, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, and
- Janet McCabe, Acting Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency.

III. SUMMARY

On September 18, 2015, the EPA issued a Notice of Violation to Volkswagen AG, Audi AG, and Volkswagen Group of America (collectively, Volkswagen or VW) based on a determination “that VW manufactured and installed defeat devices” in certain model year Volkswagen and Audi diesel passenger cars.¹ The agency alleged that VW installed engine software that “sensed” when the vehicles were undergoing emissions testing and ensured emissions control systems were operating to pass the tests. During normal vehicle use, according to the agency, the software would “switch” to a different mode that produced emissions of nitrogen oxides (NOx) up to 10 to 40 times above current EPA standards. The California Air Resource Board (CARB), which investigated the matter with EPA, issued its own “In-Use Compliance Letter” to VW at the same time.²

¹ Notice of Violation, EPA, to Volkswagen AG, Audi AG, and Volkswagen Group of America at 1 (Sept. 18, 2015) available at <http://www3.epa.gov/otaq/cert/documents/vw-nov-cao-09-18-15.pdf> [hereinafter NOV].

² Letter from Cal. Air Resources Board to VW at 1 (Sept. 18, 2015) available at http://www.arb.ca.gov/newsrel/in_use_compliance_letter.htm [hereinafter CARB letter].

The EPA actions followed VW's admission to the agency in early September 2015 that certain 2.0-liter vehicles effectively contained a "defeat device." On October 8, 2015, in testimony before the Subcommittee on Oversight and Investigations, VW of America's President and CEO, Michael Horn, admitted under oath that VW installed the "defeat device" for the express purpose of defeating emissions controls and that VW's initial representations to EPA that increased emissions were due to technical issues were false.³

In January 2016, the United States sued VW for violations of Section 203 of the Clean Air Act (CAA). Settlement talks began almost immediately. By April 2016, the parties reached an agreement in principle regarding the nearly 480,000 2.0-liter diesel engine vehicles, and on June 28, 2016, the parties filed a Partial Consent Decree.⁴ On October 25, 2016, Judge Charles Breyer approved a Partial Consent Decree resolving claims related to the 2.0-liter turbocharged direct injection (TDI) diesel engine vehicles. In addition to the buyback and modification provisions that have been widely reported, the settlement also requires VW to (1) direct \$2 billion in investments over a 10-year period to promote the use of ZEVs, including through the growth of ZEV infrastructure, in California and the United States and (2) pay \$2.7 billion into the NOx Mitigation Trust to fund Eligible Mitigation Actions.

IV. BACKGROUND

A. *Clean Air Act and EPA Regulations*

The Clean Air Act and its implementing regulations are intended to protect human health and the environment by limiting pollution caused by emissions from various sources. Title II of the CAA grants EPA the authority to establish and regulate emissions standards for mobile sources, including automobiles. Among the pollutants regulated under Title II, significant attention is placed on NOx.⁵ In combination with volatile organic compounds (VOCs), NOx contributes to the production of ground-level ozone. Ground-level ozone (also known as "smog") is also regulated under the National Ambient Air Quality provisions of the Clean Air Act.

Current emissions requirements for new motor vehicles, known as "Tier 2" standards, were promulgated in 2000 and phased in beginning in MY2004 vehicles with full compliance required by MY2009.⁶ The Tier 2 standards required manufacturers to reduce NOx emissions by 88% to 95%, depending on vehicle type, although compliance is based on fleet-wide emissions, rather than certification of each individual vehicle.⁷ In 2014, new Tier 3 standards went into effect and will generally be phased in between MY2017 and MY2025.⁸

³*Volkswagen's Emissions Cheating Allegations: Initial Questions: Hearing before the Subcomm. on Oversight & Investigations of the H. Comm. on Energy & Commerce*, 114th Cong. 55 (2015) at 19.

⁴*In re Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation* (MDL No. 2672 CRB (JSC)), Order Granting Final Approval of the 2.0-Liter TDI Consumer and Reseller Dealership Class Action Settlement at 4 (Oct. 25, 2016).

⁵ The EPA estimates that on-road vehicles account for 38% of NOx emissions.

⁶ CRS Report R43497, *Tier 3 Motor Vehicle Standards* (April 28, 2014) at 1-2.

⁷ *Id.*, at 2.

⁸ *Id.*, at 3-4.

Compliance with EPA's motor vehicle emissions standards is governed by Section 203 of the CAA. Prior to introducing a vehicle for sale in the United States, manufacturers must demonstrate that the vehicle meets emissions standards and obtain a certificate of conformity (COC) from the EPA. In the COC application submitted to the EPA, the manufacturer must list all auxiliary emission control devices (AECDs) installed on the vehicle.⁹ An AECD is defined as "any element of design which senses temperature, vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purpose of activating, modulating, delaying or deactivating the operation of any part of the emission control system."¹⁰ The manufacturer must also justify each AECD and explain why it is not a "defeat device."¹¹ An AECD is considered a "defeat device" if it:

...reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, unless: (1) Such conditions are substantially included in the Federal emission test procedure; (2) The need for the AECD is justified in terms of protecting the vehicle against damage or accident; (3) The AECD does not go beyond the requirements of engine starting; or (4) The AECD applies only to emergency vehicles[.]¹²

It is a violation of the CAA to manufacture or sell any part or component if it will "bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use."¹³ It is also a violation to sell, market, or import any new motor vehicle if it is not covered by a valid EPA-issued COC.¹⁴ Violations of these provisions are subject to civil penalties of up to \$3,750 and \$37,500, respectively, for any vehicle sold, marketed, or imported on or after January 13, 2009.¹⁵

EPA's Office of Transportation and Air Quality (OTAQ) oversees a broad set of compliance activities to ensure that vehicle manufacturers satisfy regulatory requirements. These include review of COC applications and a variety of testing and other requirements that occur over the life of a vehicle. In addition to review of manufacturer-supplied testing data, EPA's own testing may include so-called "confirmatory testing," both random and targeted, and in-use compliance testing. In addition, OTAQ conducts defect reporting programs and recall programs. According to available historical data, emissions recalls affect about three million vehicles annually.¹⁶

⁹ NOV, at 2.

¹⁰ 40 C.F.R. § 86.1803-01

¹¹ 40 C.F.R. § 86.1844-01(d)(11).

¹² 40 C.F.R. § 86.1803-01.

¹³ CAA Section 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B)

¹⁴ CAA Section 203(a)(1), 42 U.S.C. § 7522(a)(1)

¹⁵ NOV, at 5.

¹⁶ See Vehicle & Engine Compliance Activities: 2009-2011 Compliance Report, EPA, December 2013, available at <http://www3.epa.gov/otaq/documents/cert/420r13006.pdf>.

B. The NOx Mitigation Trust

Under the terms of the Partial Consent Decree, VW is to provide \$2.7 billion “to fund Eligible Mitigation Actions that will reduce emissions of NOx where the 2.0 Liter Subject Vehicles were, are, or will be operated. The funding for the Eligible Mitigation actions required by this Consent Decree is intended to fully mitigate the total, lifetime excess NOx emissions from the 2.0 Liter Subject Vehicles.”¹⁷ Unlike the ZEV Investment Commitment—which is controlled by VW, with EPA and CARB oversight—these funds will be placed in the Mitigation Trust to be held and administered by a third-party Trustee.

VW must deposit the first \$900 million into the Mitigation Trust by November 25, 2016, which is 30 days after the Effective Date of the settlement.¹⁸ VW must make two additional deposits of \$900 million no later than the first and second anniversaries of the initial deposit.¹⁹ Any additional Mitigation Trust payments required by other sections of the Partial Consent Decree will also be paid into the trust, including certain amounts that must be deposited if VW fails to achieve the required recall rate through the buyback and modification programs.²⁰

Each of the fifty states, Puerto Rico, and Indian tribes may elect to become a Beneficiary of the Mitigation Trust by filing required certifications with the court not later than 60 days after the Trust Effective Date.²¹ The Partial Consent Decree allocates a specific amount to each state. For example, Pennsylvania will get \$110,740,310. By comparison, North Dakota will receive \$7,500,000 and California will receive \$331,280,175.²² The initial allocation for each state is as follows:²³

APPENDIX D-1 – INITIAL ALLOCATION

INITIAL SUBACCOUNTS	INITIAL ALLOCATIONS (\$)	INITIAL ALLOCATIONS (%)
Puerto Rico	\$7,500,000.00	0.28%
North Dakota	\$7,500,000.00	0.28%
Hawaii	\$7,500,000.00	0.28%
South Dakota	\$7,500,000.00	0.28%
Alaska	\$7,500,000.00	0.28%

¹⁷ *In re Volkswagen “Clean Diesel” Marketing, Sales Practices, and Products Liability Litigation* (MDL No. 2672 CRB (JSC)), Partial Consent Decree at 5 (Oct. 25, 2016), available at <http://www.cand.uscourts.gov/crb/vwmdl>.

¹⁸ *Id.* at 13.

¹⁹ *Id.* at 13-14.

²⁰ *Id.* at App. D., p. 15. Under the Partial Consent Decree, VW must remove from commerce and/or perform an Approved Emissions Modification on at least 85% of 2.0-liter vehicles no later than June 30, 2019. If VW fails to achieve the required recall rate, it must pay additional funds to the Environmental Mitigation Trust. *Id.* at App. A., pg. 1. For example, for each 1% that the National Recall Rate falls short of the National Recall Target, VW must contribute \$85,000,000 to the Environmental Mitigation Trust. *Id.* at App. A., pg. 9.

²¹ *Id.* at App. D., pg. 10-11. The Trust Effective Date will be the date on which the finalized Trust Agreement, approved by the United States and executed by VW and the Trustee, is filed with the court.

²² *Id.* at App. D-1.

²³ *Id.*

INITIAL SUBACCOUNTS	INITIAL ALLOCATIONS (\$)	INITIAL ALLOCATIONS (%)
Wyoming	\$7,500,000.00	0.28%
District of Columbia	\$7,500,000.00	0.28%
Delaware	\$9,051,682.97	0.34%
Mississippi	\$9,249,413.91	0.34%
West Virginia	\$11,506,842.13	0.43%
Nebraska	\$11,528,812.23	0.43%
Montana	\$11,600,215.07	0.43%
Rhode Island	\$13,495,136.57	0.50%
Arkansas	\$13,951,016.23	0.52%
Kansas	\$14,791,372.72	0.55%
Idaho	\$16,246,892.13	0.60%
New Mexico	\$16,900,502.73	0.63%
Vermont	\$17,801,277.01	0.66%
Louisiana	\$18,009,993.00	0.67%
Kentucky	\$19,048,080.43	0.71%
Oklahoma	\$19,086,528.11	0.71%
Iowa	\$20,179,540.80	0.75%
Maine	\$20,256,436.17	0.75%
Nevada	\$22,255,715.66	0.82%
Alabama	\$24,084,726.84	0.89%
New Hampshire	\$29,544,297.76	1.09%
South Carolina	\$31,636,950.19	1.17%
Utah	\$32,356,471.11	1.20%
Indiana	\$38,920,039.77	1.44%
Missouri	\$39,084,815.55	1.45%
Tennessee	\$42,407,793.83	1.57%
Minnesota	\$43,638,119.67	1.62%
Connecticut	\$51,635,237.63	1.91%
Arizona	\$53,013,861.68	1.96%
Georgia	\$58,105,433.35	2.15%
Michigan	\$60,329,906.41	2.23%
Colorado	\$61,307,576.05	2.27%
Wisconsin	\$63,554,019.22	2.35%
New Jersey	\$65,328,105.14	2.42%
Oregon	\$68,239,143.96	2.53%
Massachusetts	\$69,074,007.92	2.56%
Maryland	\$71,045,824.78	2.63%
Ohio	\$71,419,316.56	2.65%

INITIAL SUBACCOUNTS	INITIAL ALLOCATIONS (\$)	INITIAL ALLOCATIONS (%)
North Carolina	\$87,177,373.87	3.23%
Virginia	\$87,589,313.32	3.24%
Illinois	\$97,701,053.83	3.62%
Washington	\$103,957,041.03	3.85%
Pennsylvania	\$110,740,310.73	4.10%
New York	\$117,402,744.86	4.35%
Florida	\$152,379,150.91	5.64%
Texas	\$191,941,816.23	7.11%
California	\$381,280,175.09	14.12%
Tribal Allocation Subaccount	\$49,652,857.71	1.84%
Trust Administration Cost Subaccount	\$27,000,000.00	1.00%
Tribal Administration Subaccount	\$993,057.15	0.04%
	\$2,700,000,000.00	100.00%

These initial amounts are subject to change. States which are designated as beneficiaries and receive an allotment from the Mitigation Trust may spend the funds only on projects listed in Appendix D-2 of the Mitigation Trust Agreement. These include retrofitting freight trucks, school buses, shuttle buses, ferries, and other large vehicles with a new diesel or alternate fuel engine, or all-electric engine; acquiring ZEV charging infrastructure; and a non-federal voluntary match for projects under the Diesel Emission Reduction Act.²⁴

EPA has limited authority under the NOx Mitigation Trust. Under the terms of the Partial Consent Decree, EPA may play a role in evaluating and proposing potential trustees to the Court, which will appoint the Trustee overseeing the Trust, and can inspect the books and records of the Trustee.²⁵ EPA also played a role in determining the amount of excess NOx emitted from the noncomplying VW vehicles. To date, EPA has been unwilling to explain to the Committee approximately how much NOx has been, is being, and will be emitted from the noncomplying VW vehicles. EPA has also been unwilling to explain how much NOx pollution is expected to be mitigated by the \$2.7 billion Mitigation Trust investment.

C. The ZEV Investment Commitment

The Partial Consent Decree also requires VW to make a substantial investment in ZEV investments. The purpose of the ZEV Investment Commitment is to “support increased use of zero emission vehicle technology in the United States, including, but not limited to, the development, construction, and maintenance of zero emission vehicle-related infrastructure.”²⁶

²⁴ *Id.* at App. D-2.

²⁵ *See id.* at 14-16; App. D., pg. 7.

²⁶ *Id.* at App. C, p. 1.

Over a period of ten years, VW must direct \$2 billion of investments—\$1.2 billion in national investments overseen by EPA, and \$800 million in California-specific investments overseen by CARB. “The ZEV investments required by [the] Consent Decree are intended to address the adverse environmental impacts arising from consumers’ purchase of the 2.0 Liter Subject Vehicles, which the United States and California contend were purchased with the mistaken belief that they were lower-emitting vehicles[.]”²⁷

Under the terms of the partial consent decree, VW is “solely responsible for every aspect of selecting the National ZEV Investments,”²⁸ but EPA or CARB will “review and approve” the ZEV investment plans, among other documents.²⁹ The National ZEV Investment, overseen by EPA, requires VW to spend \$300 million every 30 months, unless otherwise agreed to in writing by EPA.³⁰ The Partial Consent Decree allows VW to establish an “entity or distinct business group” to fulfill the ZEV Investment Commitment, thus enabling VW to monetize this \$2 billion investment.³¹

Appendix C defines the types of ZEV investments that VW may make. Investments that qualify for the National ZEV Investment include:

- “Design/planning, construction/installation, operation, and maintenance of ZEV infrastructure. That infrastructure should support and advance the use of ZEV’s in the United States by addressing an existing need or supporting a reasonably anticipated need. Such expenditures may include the installation of: (i) Level 2 charging at multi-unit dwellings, workplaces, and public sites, (ii) DC fast charging facilities accessible to all vehicles utilizing non-proprietary connectors, (iii) new heavy-duty ZEV fueling infrastructure (in California), (iv) later generations of the types of charging infrastructure listed in i, ii, and iii, and (v) ZEV fueling stations;”³²
- “Brand-neutral education or public outreach that builds or increases public awareness of ZEVs[;]”³³ and
- “Programs or actions to increase public exposure and/or access to ZEVs without requiring the consumer to purchase or lease a ZEV at full market value[.]”³⁴

²⁷ *Id.* at 4-5 (Oct. 25, 2016).

²⁸ *Id.* at App. C, pg. 4.

²⁹ *Id.* at App. C, pg. 6.

³⁰ *Id.* at App. C, pg. 4.

³¹ *Id.* at App. C-1, pg. 7.

³² *Id.* at App. C, pg. 3.

³³ *Id.* VW may spend no less than \$25 million but no more than \$50 million on this category of ZEV investment per 30-month investment cycle. *Id.* at 7.

³⁴ *Id.*

1. ZEV Investment Commitment Deadlines

The ZEV Investment Commitment includes a number of quick deadlines that VW must meet or else pay a financial penalty. The ZEV Investment Commitment also gives EPA an oversight role to ensure compliance with the terms of the Consent Decree.

- October 25, 2016 – Effective date of the partial consent decree.
- November 9, 2016 – VW must submit a National ZEV Outreach Plan to EPA for review and approval. (App. C., § 2.3).
 - This is a “detailed plan that addresses how [VW] will solicit input from interested states, municipal governments, federally-recognized Indian tribes...and federal agencies relevant to [VW’s] development of each 30-month phase of the National ZEV Investment Plan.”
- November 25, 2016³⁵ – VW must submit a proposed National Creditable Cost Guidance to EPA for review and approval. (App. C, § 2.2).
 - This is a “guidance document prepared by [VW] that establishes the requirements regarding [VW’s] accounting for, and documentation of, costs incurred in the implementation of the National ZEV Investment Plan.”
- November 25, 2016³⁶ – VW must submit to EPA and CARB a list of three candidates for the position of Third-Party Reviewer. (App. C, § 2.7). The United States, after consultation with CARB, shall select a candidate or make VW submit additional candidates.
- December 27, 2016³⁷ – VW shall submit the final National Creditable Cost Guidance to EPA, unless otherwise agreed in writing with EPA. (App. C, § 2.2).
- February 22, 2017 – Or 30 days after the end of the comment acceptance period under the National ZEV Outreach Plan, whichever occurs later. VW shall submit a Draft National ZEV Investment Plan to EPA that describes proposed National ZEV Investments that will be implemented for at least the next 30 months. (App. C, § 2.4).
 - EPA and VW shall meet and confer as soon as practicable after the submission to discuss the Draft National ZEV Investment Plan. (App. C, § 2.4).

³⁵ November 24, 2016 is a federal holiday, so the deadline passes to the next business day.

³⁶ November 24, 2016 is a federal holiday, so the deadline passes to the next business day.

³⁷ December 24 falls on a Saturday and Monday, December 26 is a federal holiday, so the deadline passes to the next business day.

- Within 30 days after the meet and confer on a Draft National ZEV Investment Plan, VW must submit a National ZEV Investment Plan to EPA for review and approval. (App. C, § 2.5).
- April 30, 2017 – No later than April 30 of each year following EPA’s approval of the first National ZEV Investment Plan, VW shall submit an annual report regarding the status of each National ZEV Investment. (App. C, § 2.9).

VW must submit additional National ZEV Investment plans 30 months, 60 months, and 90 months from the effective date of the Partial Consent Decree.

D. The FAST Act

Questions exist over the extent to which the VW settlement terms are consistent with congressional policy. The Fixing America’s Surface Transportation (FAST) Act, enacted in December 2015, authorizes Congress to spend over \$305 billion between 2016 and 2020 for highways and transit and represents the most current statement of congressional policy concerning federal transportation infrastructure planning. Several sections of the FAST Act addressed electric vehicles. Most notably, Section 1413, codified at 23 U.S.C. § 151, required the Secretary of Transportation to designate national electric vehicle charging and hydrogen, propane, and natural gas fueling corridors in strategic locations along major highways by December 2016.³⁸

On November 3, 2016, the Department of Transportation announced 55 routes spanning 35 states that will serve as the basis for a national network of “alternative fuel” corridors. Some corridors are designated as “sign-ready,” meaning that alternative fuel stations are already in operation, and only need new signs directing drivers toward the alternative fuel sources.³⁹

V. QUESTIONS AND ISSUES

The following issues may be addressed at the hearing:

- The role of EPA in overseeing the National ZEV Commitment;
- The potential impacts of the ZEV Commitment investments on the existing ZEV infrastructure market;
- The potential impacts of the ZEV Commitment planning and investment on national ZEV vehicle infrastructure policy;

³⁸ 23 U.S.C. § 151.

³⁹ U.S. Dep’t of Transportation, Fed. Highway Admin., *Federal Highway Administration Unveils National ‘Alternative Fuel and Electric Charging’ Network*, Nov. 3, 2016, available at <http://www.fhwa.dot.gov/pressroom/fhwa1656.cfm>.

- Issues relating to mitigation and state air quality planning requirements; and
- The current status of the implementation of the National ZEV Commitment and the NOx mitigation trust.

VI. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Peter Spencer, John Ohly, or Jen Barblan of the majority committee staff at (202) 225-2927.