VOLKSWAGEN'S EMISSIONS CHEATING SETTLE-MENT: QUESTIONS CONCERNING ZEV PROGRAM IMPLEMENTATION

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

DECEMBER 6, 2016

Serial No. 114-177



Printed for the use of the Committee on Energy and Commerce energy commerce. house. gov

U.S. GOVERNMENT PUBLISHING OFFICE

 $23\text{--}596~\mathrm{PDF}$

WASHINGTON: 2017

For sale by the Superintendent of Documents, U.S. Government Publishing Office Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800 Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON ENERGY AND COMMERCE

FRED UPTON, Michigan Chairman

JOE BARTON, Texas Chairman Emeritus ED WHITFIELD, Kentucky JOHN SHIMKUS, Illinois JOSEPH R. PITTS, Pennsylvania GREG WALDEN, Oregon TIM MURPHY, Pennsylvania MICHAEL C. BURGESS, Texas MARSHA BLACKBURN, Tennessee Vice Chairman STEVE SCALISE, Louisiana ROBERT E. LATTA, Ohio CATHY McMORRIS RODGERS, Washington GREGG HARPER, Mississippi LEONARD LANCE, New Jersey BRETT GUTHRIE, Kentucky PETE OLSON, Texas DAVID B. McKINLEY, West Virginia MIKE POMPEO, Kansas ADAM KINZINGER, Illinois H. MORGAN GRIFFITH, Virginia GUS M. BILIRAKIS, Florida BILL JOHNSON, Ohio BILLY LONG, Missouri RENEE L. ELLMERS, North Carolina LARRY BUCSHON, Indiana BILL FLORES, Texas SUSAN W. BROOKS, Indiana MARKWAYNE MULLIN, Oklahoma RICHARD HUDSON, North Carolina CHRIS COLLINS, New York

FRANK PALLONE, JR., New Jersey Ranking Member BOBBY L. RUSH, Illinois ANNA G. ESHOO, California ELIOT L. ENGEL, New York GENE GREEN. Texas DIANA DEGETTE, Colorado LOIS CAPPS, California MICHAEL F. DOYLE, Pennsylvania JANICE D. SCHAKOWSKY, Illinois G.K. BUTTERFIELD, North Carolina DORIS O. MATSUI, California KATHY CASTOR, Florida JOHN P. SARBANES, Maryland JERRY MCNERNEY, California PETER WELCH, Vermont BEN RAY LUJAN, New Mexico PAUL TONKO, New York JOHN A. YARMUTH, Kentucky YVETTE D. CLARKE, New York DAVID LOEBSACK, Iowa KURT SCHRADER, Oregon JOSEPH P. KENNEDY, III, Massachusetts TONY CÁRDENAS, California

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

TIM MURPHY, Pennsylvania Chairman

DAVID B. McKINLEY, West Virginia Vice Chairman
MICHAEL C. BURGESS, Texas
MARSHA BLACKBURN, Tennessee
H. MORGAN GRIFFITH, Virginia
LARRY BUCSHON, Indiana
BILL FLORES, Texas
SUSAN W. BROOKS, Indiana
MARKWAYNE MULLIN, Oklahoma
RICHARD HUDSON, North Carolina
CHRIS COLLINS, New York
KEVIN CRAMER, North Dakota
JOE BARTON, Texas
FRED UPTON, Michigan (ex officio)

KEVIN CRAMER, North Dakota

DIANA DEGETTE, Colorado
Ranking Member
JANICE D. SCHAKOWSKY, Illinois
KATHY CASTOR, Florida
PAUL TONKO, New York
JOHN A. YARMUTH, Kentucky
YVETTE D. CLARKE, New York
JOSEPH P. KENNEDY, III, Massachusetts
GENE GREEN, Texas
PETER WELCH, Vermont
FRANK PALLONE, JR., New Jersey (ex
officio)

CONTENTS

	Page				
Hon. Tim Murphy, a Representative in Congress from the Commonwealth of Pennsylvania, opening statement	1				
Prepared statement	3				
Hon. Marsha Blackburn, a Representative in Congress from the State o Tennessee, opening statement					
Hon. Frank Pallone, Jr., a Representative in Congress from the State of	0.1				
New Jersey, prepared statement	31				
rado, prepared statement					
Hon. Janice D. Schakowsky, a Representative in Congress from the State of Illinois, prepared statement					
WITNESSES					
Cynthia Giles, Assistant Administrator, Office of Enforcement and Compliance Assurance, Environmental Protection Agency					
Prepared statement ² Answers to submitted questions ³	$\frac{7}{123}$				
Submitted Material					
Subcommittee exhibit binder	35				
	55				
¹ Ms. McCabe did not offer oral testimony. ² Ms. Giles and Ms. McCabe submitted a joint prepared statement.					
³ Questions for the record were submitted jointly to Ms. Giles and Ms. McCabe.					

VOLKSWAGEN'S EMISSIONS CHEATING SET-TLEMENT: QUESTIONS CONCERNING ZEV PROGRAM IMPLEMENTATION

TUESDAY, DECEMBER 6, 2016

House of Representatives,
Subcommittee on Oversight and Investigations,
Committee on Energy and Commerce,
Washington, DC.

The subcommittee met, pursuant to call, at 11:04 a.m., in Room 2322, Rayburn House Office Building, Hon. Tim Murphy (chairman of the subcommittee) presiding.

Members present: Representatives Murphy, Burgess, Blackburn, Griffith, Bucshon, Flores, Mullin, Hudson, Collins, DeGette, Tonko,

and Kennedy

Staff present: Grace Appelbe, Staff Assistant; Jennifer Barblan, Counsel, Oversight and Investigations; Elena Brennan, Staff Assistant; Blair Ellis, Digital Coordinator/Press Secretary; Charles Ingebretson, Chief Counsel, Oversight and Investigations; A.T. Johnston, Senior Policy Advisor; Dan Schneider, Press Secretary; Peter Spencer, Professional Staff Member, Oversight and Investigations; Rick Kessler, Democratic Senior Advisor and Staff Director, Energy and the Environment; Christopher Knauer, Democratic Oversight Staff Director; Elizabeth Letter, Democratic Professional Staff Member; Miles Lichtman, Democratic Professional Staff Member; Dan Miller, Democratic Staff Assistant; Matt Schumacher, Democratic Press Assistant; and Andrew Souvall, Democratic Director of Communications, Outreach, and Member Services.

OPENING STATEMENT OF HON. TIM MURPHY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. Murphy. Good morning. This is the Oversight and Investigations hearing on Volkswagen's Emissions Cheating Settlement Concerning the ZEV Program Implementation. Here we will hear testimony to address the significant questions the Oversight Subcommittee has about a \$2 billion investment program embedded in a recently approved partial consent decree to settle numerous claims against Volkswagen.

Just over a year ago, VW admitted to Federal authorities as well as this subcommittee that it been thwarting Federal emissions tests for years. VW willfully and knowingly cheated, having installed engine software in 480,000 diesel vehicles to defeat emissions tests. This is a clear violation of Federal law. The reasons for

VW's nefarious actions are now quite clear. Despite having committed to producing, quote, "clean diesel," unquote cars, it couldn't meet the Clean Air Act standards without installing the software to cheat testing machines, and ultimately hundreds of thousands of consumers.

It is also clear that VW deserved to be held to account for their illegal actions, for the harm to consumers, and the environment, and this violation of the public trust. In January, the United States sued VW for violations under the Clean Air Act. Hundreds of other parties brought actions. The cases were consolidated, and settlement talks commenced and eventually reached an agreement. In late October, a U.S. District Court approved a \$15 billion partial consent decree resolving many claims concerning the 2.0 liter engines, and including buyback and modification provisions to address the economic harm to VW customers.

Yet, a piece of this settlement raises the potential that VW's penalty for bad behavior may not be entirely without benefit for VW's own future operations. The settlement requires VW to invest a substantial amount of money in infrastructure and education to expand the market for Zero Emission Vehicles, such as plug-in electric cars, coincidentally just as VW was launching a new strategy to enter and grow its share in the electric vehicle market. Under this so-called ZEV investment commitment to the partial consent decree, VW must spend \$800 million over the next 10 years into infrastructure and market development in California to be overseen by the State of California, and \$1.2 billion over the same period in the rest of the Nation to be overseen by the EPA.

This works out to VW having to invest nearly \$500 million every 30 months. To put this in perspective, the total market for U.S. electric charging infrastructure, including installation, has been estimated by industry to be up to \$800 million over the next 30 months. So VW has agreed to spend at a rate that would nearly double the size of this market. Think about the regulatory and oversight considerations if this massive influx of infrastructure investment was Government spending, like a stimulus package. The pace and scale of such investment would be of great interest to pre-existing market players who would stand either to benefit from an enlarged market, or to suffer from public money that would crowd out competition.

In many respects, VW's mandated investment threatens a similar situation, but the ZEV investment oversight provisions appear pretty thin, especially at the Federal level. Most notably, VW will apparently have the sole discretion for how it will invest these sums in a \$1 billion national program overseen by the EPA, creating opportunity for VW to gain an enormous competitive advantage.

tage.

Now, we are not here today to ask EPA to renegotiate the agreement. But now that it is final, we need to understand how it will work, how it will affect businesses already in the Zero Emission Vehicle marketplace, and what EPA's role is in administering this huge financial commitment. We wish there were more time, but EPA must make some decisions, even as we speak. And the big decision on VW's plan for spending the first \$300 million will come early next year. It is against this backdrop that we wrote EPA in

early November, and we asked EPA here today to help us build a record on the issues surrounding the ZEV program implementation, and the measures necessary to protect market competition as investment plans developed. I'm expecting to hear what EPA's oversight role will be, and given the enormous amount of money to be invested, how it will impact the policymaking landscape.

I also want to hear what actions EPA will make to ensure pro-

grams like this do not encroach on congressional interests.

VW betrayed the public trust with this cheating scandal, and we are here this morning to ensure the agencies responsible for developing and agreeing to this deal will ensure the public interest is protected.

[The prepared statement of Mr. Murphy follows:]

PREPARED STATEMENT OF HON. TIM MURPHY

Today the subcommittee will hear testimony from the Environmental Protection Agency to address significant questions the Oversight Subcommittee has about a two-billion-dollar investment program embedded in a recently approved partial consent decree to settle numerous claims against Volkswagen.

Just over a year ago VW admitted to Federal authorities, as well as this subcommittee, it had been thwarting Federal emissions tests for years. VW willfully and knowingly cheated, having installed engine software in 480,000 diesel vehicles

to defeat emissions tests. That is a clear violation of Federal law.

The reasons for VW's nefarious actions are now clear: despite having committed to producing "clean diesel" cars, it couldn't meet the Clean Air Act standards without installing the software to cheat testing machines and ultimately hundreds of thousands of consumers.

It is also clear that VW deserved to be held to account for their illegal actions,

for the harm to consumers and the environment, and this violation of the public

In January, the United States sued VW for violations under the Clean Air Act. Hundreds of other parties brought actions, the cases were consolidated and settlement talks commenced and eventually reached an agreement.

In late October, a U.S. District Court approved a 15-billion-dollar partial consent

decree resolving many claims concerning the 2.0 liter engines and including buyback and modification provisions to address the economic harm to VW customers.

Yet a piece of this settlement raises the potential that VW's penalty for bad behavior may not be entirely without benefit for VW's own future operations. The settlement requires VW to invest a substantial amount of money in infrastructure and education to expand the market for zero emission vehicles, such as plug-in electric cars, coincidentally just as VW is launching a new strategy to enter and grow its share in the electric vehicle market.

Under this so-called ZEV investment commitment in the partial consent decree, VW must spend \$800 million over the next 10 years into infrastructure and market development in California, to be overseen by the State of California, and \$1.2 billion over the same time period in the rest of the Nation, to be overseen by EPA.

This works out to VW having to invest nearly \$500 million every 30 months. To put this in perspective, the total market for U.S. electric charging infrastructure (including installation) has been estimated by industry to be up to \$800 million over the next 30 months. So VW has agreed to spend at a rate that would nearly double the size of this market.

Think about the regulatory and oversight considerations if this massive influx of infrastructure investment was Government spending, like a stimulus package. The pace and scale of such investment would be of great interest to pre-existing market players who would stand either to benefit from an enlarged market or to suffer from

public money that would crowd out competition. In many respects, VW's mandated investment threatens a similar situation, but the ZEV investment oversight provisions appear pretty thin, especially at the Fedreal level. Most notably, VW will apparently have sole discretion for how it will invest these sums in the billion-dollar national program overseen by EPA—creating opportunity for VW to gain an enormous competitive advantage.

We are not here today to ask EPA to renegotiate the agreement, but now that it is final, we need to understand how it will work, how it will affect businesses al-

ready in the zero emission vehicle marketplace and what EPA's role is in admin-

istering this huge financial commitment.

We wish there were more time, but EPA must make some decisions even as we speak, and the big decision on VW's plan for spending the first \$300 million will come early next year. It is against this backdrop that we wrote EPA in early November and we asked EPA here today to help us build a record on the issues surrounding ZEV program implementation and the measures necessary to protect market competition as investment plans developed.

I'm expecting to hear what EPA's oversight role will be, and given the enormous

amount of money to be invested, how it will impact the policymaking landscape. I also want to hear what actions EPA will make to ensure programs like this do not

encroach on Congressional interests.

VW betrayed the public trust with its cheating scandal. We are here this morning to ensure the agencies responsible for developing and agreeing to this deal will ensure the public interest is protected.

Mr. Murphy. Now, we are waiting for the Democrats to come onboard. So is there another Member this side that would like to make an opening statement?

I recognize the vice chair of the committee, Mrs. Blackburn, for

5 minutes.

OPENING STATEMENT OF HON. MARSHA BLACKBURN, A REP-RESENTATIVE IN CONGRESS FROM THE STATE OF TEN-

Mrs. Blackburn. I want to thank you all for being here. And as the chairman said, we have some questions about EPA and their role and their ability to oversee this. And also VW's participation in this. I think one of the things that I want to hear from EPA is how active, how passive is this role in monitoring going to be? What are your expectations? And then, do you have the necessary skill sets in order to do this?

The second thing I'm going to want to know is about the data that is going to be collected when the cars are in these stations. Who owns that data? Is it VW? Is it going to be the EPA? Who's going to own this data? And then what are they going to do with that data? What are the restrictions on it? Who owns the transfer rights? Who is going to hold those transfer rights on this information? So as we get to questions, I will want to discuss that with you, because I think that as we look at this expansion and VW rolling out this, I think we need to have a discussion about that component of the data also.

And, Mr. Chairman, I yield back.

Mr. Murphy. Is there anyone on our side that has any other opening statements to begin with?

Seeing none, we will move forward. Let me just mention a couple things:

First of all, I ask unanimous consent that the Members' written opening statements be introduced into the record. And without objection, the documents will be entered into the record.

I also want to explain the minority is delayed by a caucus meeting. They will be here as soon as they can be. And at that time, they will be able to make opening statements. But in the meantime, we will move forward with our panel.

So let me introduce our two witnesses for today's hearing, both from the U.S. Environmental Protection Agency. First, we have Cynthia Giles, Assistant Administrator in the Office of Enforcement and Compliance Assurance at the EPA, and Janet McCabe, Acting Assistant Administrator in the EPA's Office of Air and Radiation. Both our witnesses come to us today with extensive experience in environmental service in the public, private, and nonprofit sectors. Thank you, Ms. Giles and Ms. McCabe, for being here today. And we look forward to hearing from you in this very important matter.

You're aware the committee is holding an investigative hearing, and when doing so, has the practice of taking testimony under oath. And do you have any objections to taking—giving testimony under eath?

Seeing no objections, the Chair would advise you that under the rules of the House and rules of the committee, you're entitled to be advised by counsel. Do you desire to be advised by counsel during your testimony today?

And seeing none, then in that case, would you please rise and raise your right hand, and I'll swear you in.

[Witnesses sworn.]

Mr. Murphy. Thank you. You are now under oath and subject to the penalties set forth in title 18, section 1001 of the United States Code. We'll have you each gave a 5-minute summary of your written statement—we're just doing one statement? All right. Ms. Giles, you're recognized for 5 minutes.

STATEMENTS OF 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

STATEMENT OF CYNTHIA GILES

Ms. GILES. Thank you, Mr. Chairman and distinguished members of the subcommittee. I am Cynthia Giles. I am the Assistant Administrator of the Environmental Protection Agency's Office of Enforcement and Compliance Assurance. And I'm joined today by Janet McCabe, the Acting Assistant Administrator in the Office of Air and Radiation. Thank you for the opportunity to testify about the Volkswagen settlement achieved by EPA, the Department of Justice, and the California Air Resources Board.

In close coordination with our partners, EPA achieved a groundbreaking settlement using the authority provided to EPA by Congress under the Clean Air Act. Our priority from the start was to remedy the damage VW caused when it sent half a million cars onto our roads emitting harmful pollution far in excess of reasonably achievable, cost-effective Federal standards. These standards are in place to protect the air we breathe. And through this settlement, we are upholding these standards and delivering on our obligation under the Clean Air Act to protect public health for all Americans.

In October, the court formally approved the settlement agreement, partially resolving allegations that Volkswagen violated the Clean Air Act by the sale of approximately 500,000 vehicles containing 2-liter diesel engines equipped with defeat devices. Through

three key provisions, the settlement holds Volkswagen accountable and puts in place remedies for the violations. VW must offer to buy back or fix the violating cars; VW is required to pay \$2.7 billion into a trust account to fund mitigation projects selected by the States; and VW will invest an additional \$2 billion to promote the

development and use of clean vehicle technologies.

The subcommittee today has asked us to focus on the third element, investment in clean vehicle technology, which is just one part of this comprehensive partial settlement. Over the course of several years, Volkswagen sold vehicles in the United States that it claimed were green, lower-emitting, and clean diesel vehicles. Consumers looking to reduce air pollution purchased these vehicles on the premise that they were clean. But we now know that, in fact, they emit up to 40 times the allowable level of NOx pollution.

VW's violations of the Clean Air Act undercut the market for truly green vehicles, resulting in illegal pollution and not the cleaner air that was promised. The zero emissions vehicle, or ZEV, investment requirement is a court-ordered remedy intended to address the harm that VW caused by requiring investments to accelerate the growth of clean transportation, and to advance cleaner

air in America.

The settlement requires Volkswagen to develop investment plans over a 10-year period, totaling \$2 billion nationwide that will increase the necessary ZEV infrastructure, improve access to ZEVs, and promote education about ZEVs in the United States. "ZEV" means any zero emitting vehicle, including battery electric vehicles, fuel cell vehicles, and certain on-road plug-in hybrid electric vehicles. The settlement means more people have opportunities to use ZEVs without having to purchase or lease one, for example, through car sharing programs. More drivers of electric cars will find a charge when they need one. And there will be more brandneutral public outreach efforts across the country about the benefits of ZEVs.

The agreement also includes strong transparency and accountability measures. VW is explicitly required to solicit and consider input from States, municipalities, tribes and other Federal agencies, before it makes ZEV investment decisions. And it must make its investment plans available online.

VW's ZEV infrastructure investments and its public outreach efforts must be brand neutral, meaning ZEV infrastructure must be accessible to all ZEV vehicles utilizing nonproprietary charging

equipment, and not just the ones VW makes.

The ZEV investment plan will be updated every 30 months, ensuring that the investments account for changes in ZEV technology and the market. And all Federal, State, and local laws will apply

to Volkswagen as they do to any other company.

EPA, working with DOJ, will ensure that VW follows the rules, that it satisfies the requirements for stakeholder engagement, that the investments are truly brand neutral, and that VW complies with all the terms of the settlement.

This settlement ensures that Volkswagen finally delivers on the promise it made for cleaner air and a cleaner transportation future.

Thank you for the opportunity to testify. And we would be happy to answer any questions.

[The prepared joint statement of Ms. Giles and Ms. McCabe follows:]

Testimony of Cynthia Giles, Assistant Administrator
Office of Enforcement and Compliance Assurance
and
Janet McCabe, Acting Assistant Administrator
U.S. Environmental Protection Agency
Before the
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
U.S. House of Representatives

December 6, 2016

Mr. Chairman, Ranking Member DeGette, distinguished Members of the Subcommittee, I am Cynthia Giles, Assistant Administrator of the U.S. Environmental Protection Agency's Office of Enforcement and Compliance Assurance. I am joined by Janet McCabe, Acting Assistant Administrator in the Office of Air and Radiation. Thank you for the opportunity to testify about the Volkswagen (VW) settlement achieved by the EPA, the Department of Justice and the California Air Resources Board (CARB).

In close coordination with our partners, the EPA achieved a groundbreaking settlement using the authority provided to the EPA by Congress under the Clean Air Act. Our priority from the start was to remedy the damage VW caused when it sent half a million cars onto our roads, emitting amounts of harmful pollution far in excess of reasonably achievable, cost-effective federal standards. These standards are in place to protect the air we breathe, and through this settlement, we are upholding these standards and delivering on our obligation under the Clean Air Act to protect public health for all Americans.

On October 25, 2016, the U.S. District Court for the Northern District of California formally approved the settlement agreement, partially resolving allegations that Volkswagen violated the Clean Air Act by the sale of approximately 500,000 model year 2009 to 2015 motor

vehicles containing 2.0 liter diesel engines equipped with "defeat devices." The settlement does not resolve pending claims for civil penalties or any claims concerning 3.0 liter diesel vehicles or any potential criminal liability. However, the settlement does hold Volkswagen accountable for its illegal actions, and puts in place remedies for the harm VW caused. The 2.0 liter settlement is made up of three key provisions: 1) VW must offer to buy back or fix the violating cars (if an emissions modification proposal is approved by the EPA and CARB); 2) VW is required to pay \$2.7 billion into a trust account to be used to fund mitigation projects across the country; and 3) VW will invest an additional \$2 billion to promote the development and use of clean vehicle technologies.

Over the course of several years, Volkswagen sold vehicles in the United States that it claimed were "green," "lower emitting," and "clean diesel" vehicles. Consumers looking to reduce air pollution purchased these vehicles on the premise that they were clean vehicles. We now know that the vehicles are far from clean. In fact, they emit up to 40 times the allowable levels of NOx pollution. NOx reacts in the atmosphere to form ozone and fine particulate matter which contribute to adverse health effects in communities across the country.

VW's excess emissions constitute clear and serious violations of the Clean Air Act. This is the nexus of the zero-emission vehicle component of the settlement: the ZEV investment requirement is a court-ordered remedy intended to address the specific harm that VW caused to public health by requiring investments to accelerate the growth of clean transportation and to advance cleaner air in America.

The settlement requires Volkswagen to develop investment plans over a ten-year period totaling \$2 billion nationwide that will increase necessary infrastructure, improve access to ZEVs, and promote education about ZEVs in the United States. "ZEV" means any zero emitting

vehicle, including battery electric vehicles, fuel cell vehicles, and certain on-road plug-in hybrid electric vehicles. This means more people will have opportunities to use ZEVs without having to purchase or lease one, for example through car sharing programs. More drivers of electric cars will find a charge when they need one. And there will be more brand-neutral public outreach efforts across the country about the benefits of ZEVs. Importantly, the agreement does not direct which ZEV technology should be supported. VW makes that determination after considering public input, based on what will most support advances in the ZEV market.

We ensured that the agreement includes strong transparency and accountability measures:

- VW must provide opportunities for stakeholders to provide meaningful input into VW's plans. VW is explicitly required to solicit and consider input from states, municipalities, tribes and other federal agencies before it makes ZEV investment decisions. VW's investment plans will also be available on the internet, and will have to include the evidence and basis for VW's conclusion that the investments will advance use of ZEVs. This robust process of stakeholder input and public transparency will help ensure a credible and effective business investment strategy that will improve air quality in this country and benefit all Americans, regardless of the car they drive.
- VW's ZEV infrastructure investments and its public outreach efforts must be brand
 neutral. That means that ZEV infrastructure must be accessible to all ZEV vehicles not
 just the ones VW makes utilizing non-proprietary charging equipment. It also means
 that ZEV outreach cannot feature or favor VW's vehicles. The agreement sets strict limits
 to make sure VW adheres to this essential requirement so that everyone interested in
 cleaner transportation businesses, governments and consumers will benefit.

• The ZEV investment plan will be updated every 30 months, ensuring that the investments account for changes in ZEV technology and the ZEV market. The updated plans must include comprehensive statements that specify just how the investments will be made, including the locations, schedule, and maintenance, and referencing credible reports and studies that demonstrate that such proposals will advance use of ZEVs in the US. These plans, and the annual reports that VW will prepare to report on its progress, will be publicly available on the internet.

This unprecedented level of transparency will allow researchers, competitors, and other informed commenters to see how effective the investments have been, and to suggest different approaches for the next plan that might work better. We are expecting that the information that VW is required to make public under the agreement will spark some interesting public discussion about the best approaches.

VW's ZEV investments have specific limits and boundaries clearly stated in the settlement. They must be above and beyond whatever investments VW had already planned to make – VW gets no credit for plans already in the works before the EPA made the violations public, or for things that VW has to do to comply with the law. ZEV investments under the agreement have to be directly related to the specific purpose of the agreement, which is to advance use of ZEVs, and certain costs are not allowable, such as legal, administrative, taxes and other costs not directly related to the required categories of investment. An independent third party accountant will review and audit all expenditures to check that VW is meeting all the rules.

All federal, state and local laws, permitting requirements and other provisions apply to VW as they do to any other company. Nothing in the settlement allows VW to do anything that it could not do without the agreement.

The EPA's role in the ZEV investment agreement is limited but essential: the EPA, working with the Department of Justice, will ensure that VW complies with the requirements for stakeholder engagement, that the investments VW makes in infrastructure and outreach are truly brand neutral, and that VW complies with all the terms of the settlement, including that Volkswagen's plan is informed by the input it gets from stakeholders and by the changing market conditions.

This settlement ensures that Volkswagen finally delivers on the promise it made for cleaner air and a cleaner transportation future, in a way that incorporates meaningful input from the many interested stakeholders.

Thank you for the opportunity to testify. We would be happy to answer any questions.

Mr. Murphy. Thank you. I now recognize myself for 5 minutes. Ms. Giles—and I apologize for mispronouncing your name—in a few words, can you tell me the purpose of the ZEV investment commitment and the NOx mitigation trust in the Volkswagen matter?

Ms. GILES. Both of those provisions are part of the three-part structure to remedy the harm caused by VW's violations to get the pollutant cars off the road, to mitigate the NOx pollution that they

caused, and to invest in a clean transportation future.

Mr. Murphy. Thank you. Now, part of the settlement requires Volkswagen to pay \$2.7 billion into a NOx mitigation trust. The partial consent decree states, and I quote, "The funding for the eligible mitigation actions provided for herein is intended to fully mitigate for total lifetime excess NOx emissions from the 2.0 liter subject vehicles where"—"or will be operated." Now, that sounds like to me, when you say fully mitigate total lifetime, that sounds like 100 percent. Am I correct on that?

Ms. GÎLES. The mitigation trust is part, as I said, of a three-part remedy that is designed to address the different types of violations

that VW had.

Mr. Murphy. I understand that. OK. But tell us today the amount of the total lifetime excess NOx emissions from these vehicles?

Ms. GILES. The mitigation trust, as you mentioned, is part of the three parts designed to remedy NOx emissions. And it sets up a trust that is run by a trustee to approve and oversee the expenditures by States of the funds that are allocated to them.

Mr. Murphy. Well, let me come back to that in a second there. In your written statement, you talk a lot about how transparent the settlement agreement is. But I have a hard time seeing that transparency, if we can't see the local back to that in a second there.

NOx emissions will be mitigated. Can you give us that?

Ms. GILES. The only calculations we have done with respect to the NOx emissions were done in support of the enforcement case. And that enforcement case is not over. We still have the 3-liter vehicles, we have civil penalties, and the ongoing criminal investigation. So your specific question is relevant to those ongoing portions of the case and not something we can talk about here.

Mr. MURPHY. But I'm still having a little trouble. I'm just trying to clarify this, that if we take your word that the total environment harm is mitigated by the NOx mitigation agreement, what's the

purpose of the ZEV investment commitment?

Ms. GILES. Those two components are designed to address separate harms. The mitigation portion is to make up for the pollution caused, and the ZEV portion is to address the fact that they sold dirty vehicles claiming they were clean.

Mr. Murphy. Is that a penalty? Is that a penalty then?

Ms. GILES. No, it is not a penalty. These are all part of the in-

junctive relief in the case.

Mr. Murphy. So I've accepted there's a legitimate purpose, then, for the ZEV investment commitment. I'm still trying to find how I determine what that is. There are conflicting statements coming out of EPA and what the role of the ZEV investment commitment is, and what authority EPA has to ensure that it meets those goals.

What does it mean to fully mitigate the total lifetime excess NOx emissions? Can you please define that for me?

Ms. GILES. The NOx reduction provisions of mitigation are one part, as I've said, of a three-part strategy to address the violations. So we're addressing the cars on the road as one part, the NOx emissions from the vehicles as the second part, and the third part

is to remedy the damage caused to the marketplace.

Mr. Murphy. Yes, I hear that part. And those are noble causes. I just wonder if there's some double jeopardy here. So in your November 18 letter to the committee, you wrote, quote, "The partial consent decree does not allow the EPA to substitute its preferences for choices made by Volkswagen." So that makes it sound like VW can pretty much invest in whatever it wants, which is concerning, given that VW has announced that it's going to have this brandnew business plan for electric vehicles. And a few months ago the head of the EPA's Office of Transportation Air Quality, Chris Grundler, was quoted as saying that EPA would have a much larger say in how VW spent the \$1.2 billion for ZEV infrastructure. Mr. Grundler went on to state, "We have work to do with the new team and with our colleagues at the Transportation and Energy Departments to come up with a collective vision for what infrastructure would look like nationally, so we can make an informed decision when Volkswagen comes in with their plan that is consistent with ours, so that the \$2 billion is not wasted." Mr. Grundler also stated that he didn't want all the money to go to fast charging stations, and that there should be an emphasis on providing the charging station at multi-family dwellings. So which is it? Does the EPA have a limited but essential role where you will not be substituting your own preferences for Volkswagen, or is the EPA actually going to make VW's plan fit within EPA's vision of ZEV infrastructure?

Ms. GILES. The consent decree clearly provides that the decisions are made by VW. They are in charge of the investment decisions. EPA has a limited but important role to make sure that VW com-

plies with the consent decree.

Mr. Murphy. So VW can make their own decisions on how this is going to go. I see. Well, we'll come back to that.

I now will—my time is up. I now recognize Mrs. Blackburn for 5 minutes.

Mrs. BLACKBURN. Thank you. Your answer to the chairman's question makes it sound like VW's going to have a lot of autonomy over this situation. So let's go to the issue of data, and the data that is coming in off of the charging stations. And let's talk specifically for a minute about who is going to collect it? Who's going to hold it? How are they going to be able to use it? Would VW be able to take that data and use it as a marketing plan for their cars? Would they be able to take that information and use it to incent sales? So talk to me about that data, and then, also, the transfer rights that should be accompanying or overriding that data.

Ms. GILES. Well, there are a couple provisions that are relevant to your specific question. One is, as I mentioned briefly before, that VW has to comply with all of the laws that any other company in this marketplace would comply with. The specific—

Mrs. BLACKBURN. Well, let me interject right there. We have no laws on the book that apply to transfer rights on data. And we do

not have a data security law on the book. So go ahead.

Ms. GILES. As to your specific question about the data, one of the essential parts of the transparency that is required by this consent decree is that VW is required to collect information about the charging stations that it installs, and to make that data available to the public as part of the robust transparency that we are building into this consent decree. So that information will be available to the public, to competitors, who will have quite a big window into VW's operations.

Mrs. Blackburn. So then what we may want to do is look at something regarding timing on collection, and when that data is made public, so that they don't capture and hold that and then release it a year later or 2 years later, that everyone has access at

the same time.

Ms. GILES. So the consent decree specifically provides that VW has to file annual reports, which are public and posted on the Web, that will include the data from the charging stations that they have installed.

Mrs. Blackburn. So then, in essence, what you're telling me is for a 365-day period, they will—and they and they alone, will have access to that data to manipulate it, to work with it, to advertise or to market. But it will be theirs. And then after that period of time, it will be made public. So would that be your understanding?

Ms. GILES. Well, the consent decree provides that they have to

make that data available to everyone annually. So-

Mrs. BLACKBURN. Do you not see a little bit of a concern with this if there is no restriction that—see, one of the things that we've discussed in our communications and technology subcommittee and others here is looking at the data security issues and looking at who owns the virtual "you." It's a part of our privacy debate. It is something that encompasses much of what is transpiring in the

Internet of things.

And from what I'm hearing from you, it sounds as if you all do not have a clear understanding as to who is going to have first the right of refusal over that data. Is it the person that owns the vehicle? Is it the—is it Volkswagen, because they're the ones that are manning the stations? Within that 365-day period of time, what are the restrictions on them? And what is their ability to use that prior to anyone else having access to that? You know, it's one thing to say—and we see this all the time when you look at patents and copyrights, you know. And if someone says, "Well, you know, it's out there in the public domain"—but, yes, then what did that person do with it before it went to the public domain? So this is Volkswagen taking this data, and then they're going to have use of it for a year, and then at the end of the year, they're going to make a report as to what that data is. But in the meantime, it is theirs. So you could look at it and say, "Wow, \$2 billion. That was quite a settlement." But look what they bought.

Ms. GILES. Well, every company in this market operates with a

Ms. GILES. Well, every company in this market operates with a lesser degree of transparency than VW will do. VW has to solicit input on what this plan contains. Their investments specifically have to be brand neutral, and they have to update their plan every

30 months to account for changes in the marketplace, and they have to be very transparent. So they are going to be substantially more transparent than other companies in the-

Mrs. Blackburn. After 365 days.

I vield back.

Mr. Murphy. Thank you. The gentlelady yields back.

I now recognize Dr. Burgess for 5 minutes.

Mr. Burgess. Thank you, Mr. Chairman. And I-this settlement that has been crafted and created is—I mean, it's the first time I've ever seen anything like this. I mean, the language. The language that's written in the court settlement is some of the most detailed

and densely technical language that I have ever read.

Just to carry on with Vice Chairwoman Blackburn's concerns, if I'm reading correctly in appendix C in the settlement that deals with the issue of data—yes, I think what the chairwoman is suggesting is very possible, that there would be almost a year's benefit to the company that has been monitoring the activity at their charging stations. I don't even know, does Volkswagen have an electric vehicle on the market?

Ms. GILES. I believe they do. Yes.

Mr. Burgess. So they will have almost a year's advantage on anyone else in that market space with their ability to monitor consumer behavior and consumer use of their charging stations. I don't begrudge them that, but that is a fact. And I don't think, again, as I read appendix C of the agreement, I don't see there's anything to prevent that. And if I were clever, and I have to believe the people at Volkswagen are, because they wouldn't be in this position if they hadn't been somewhat clever, that they'll be able to use and manipulate that data and use to it to their advantage. I would be surprised if they didn't, in fact. I don't know if there's any way that that can be dealt with differently, but just as I read appendix C, that's my takeaway.

Who advised—this is written—this document is produced by the Federal district court. Is that correct?

Ms. GILES. The settlement agreement was written by EPA and the California Air Resources Board with VW.

Mr. Burgess. So it was your assets that then went into drafting this settlement?

Ms. GILES. That's correct.

Mr. Burgess. So it was people of the United States, essentially, who paid for the production of this very detailed document that we have in front of us. Is that correct?

Ms. GILES. As with all EPA enforcement actions, yes.

Mr. Burgess. I will confess to being a little bit concerned about the characteristics of the directors of that board, although they are spelled out of the-I don't know what you call them, the reviewers or the monitors, although it is spelled out in the agreement, and that they're not supposed to have any conflicts, and they're not supposed to go to work for the company within 2 years' time of having—what enforcement do you have over that? How do you prevent someone who says, you know, Volkswagen just cut me a real good deal. So I'm leaving the board and I know what it says in print, but what-how do you prevent that? What mechanism is at your disposal?

Ms. GILES. Well, we certainly appreciate your careful reading of appendix C. That's great to hear. The independent financial auditor in the appendix C agreement that you've mentioned does have very clearly spelled out independence obligations. And their job as accountants is to look at the information that VW gives them, and to attest whether it meets the requirements that are very detailed for what counts as credible costs under the agreement. EPA retains, as we do in all our enforcement cases, the ability to make the decision of if the company has complied with the consent decree or not.

Mr. BURGESS. Is this settlement—I mean, it seems unique to me. But maybe I'm just naive. Is this a standard type of EPA settlement? I mean, do these things happen frequently?

Ms. GILES. It is very typical for us to have enforcement cases where we require the company to fix the pollution problem and to redress the harms caused, and that's what we've done in this case.

Mr. Burgess. But this creation of \$2 billion of electric substation charging infrastructure, that seems a little unusual to me. But, again, I'll defer to the EPA on this. It's not something that I am familiar with encountering with 14 years on this subcommittee.

Ms. GILES. Well, every enforcement remedy is tailored to the facts of a particular case. And in this case, as you know, we had very egregious violations of the laws that protect clean air in this country. This remedy—

Mr. Burgess. Where did this idea originate—from where did it originate? Can you tell me that?

Ms. GILES. That was part of our settlement discussions.

Mr. Burgess. But who advised you on that?

Ms. GILES. Well, I'm not in a position to talk about our settlement discussions, in part, because we have a court order prohibiting me from doing that.

Mr. Burgess. At some point will those documents become public? Ms. Giles. I don't know the answer to that question. I can just tell you that right now, when the case is ongoing, we're not in a position to discuss the settlement negotiations.

Mr. Burgess. So much for transparency. Mr. Chairman, I'll yield back.

Mr. Murphy. The gentleman yields back.

Dr. Bucshon, you're recognized for 5 minutes.

Mr. Bucshon. Mr. Chairman, I don't have any specific questions. Can I yield my time to someone else?

Mr. Murphy. Well, next would be Mr. Flores for 5 minutes.

Mr. FLORES. Mr. Chairman, I'll pass at this point, and maybe in the second round.

Mr. MURPHY. Thank you.

Mr. Griffith.

Mr. GRIFFITH. OK. How many cars—do you know how many cars has VW purchased back?

Ms. GILES. I don't know the answer to that question.

Mr. GRIFFITH. Do you know if they've purchased any back?

Ms. GILES. I don't know.

Mr. GRIFFITH. Are you all doing anything to see if they're in compliance with that?

Ms. GILES. We will be closely monitoring what they are required to do. There is no current obligation that cars already have been

purchased back.

Mr. Griffith. When—and I was just looking through the court order to see if I could find it—when do we expect that process to start? And let me say so that I'm not misleading anybody, I'm one of the people who gets compensated under this. I'm an owner of a Volkswagen diesel, and we filed our work, and I've got a constituent who is keeping me advised on their process. They filed all of their paperwork. She's already got her new car picked out and just waiting. And so I'm just curious. It's been closing in on 40 days since the court approved the agreement. You all reached an agreement, I think, in August. Court had to approve it. I get that. I'm just wondering if anybody's following up with Volkswagen to see that the consumers are, in fact, protected.

Ms. GILES. Absolutely. So there is a very extensive process set up which you probably have been exposed to that was set up by the plaintiff steering committee and the FTC and others to figure out exactly what the schedule should be for implementing the consumer's choice of whether they prefer buyback or fix if one is approved. So there is an established process that is being followed.

Mr. Griffith. All right. If you all would just follow up on that,

I would greatly appreciate it.

And then, I have some of the concerns that other folks have raised in regard to, you know, how active you all are going to be, and is this actually going to end up benefiting Volkswagen. Because while I've driven a lot of Volkswagens over the years, certainly don't condone their bad behavior in this circumstance. And—and so just want to make sure that this is all working out the way that it was intended to, and whether it's the data that we've heard about or whether it's making sure that they don't come up with a crafty plan that actually rewards them for that bad behavior, it's very important to us.

Ms. GILES. The consent decree specifically provides, as you probably are aware, that VW's investments and their outreach must be brand neutral. So they have to make that accessible to any car with a standard plug, even if it's not the one that VW cars use.

And as to your second point, EPA is going to be very active in making sure that VW follows the requirements of the consent decree.

Mr. GRIFFITH. All right. With that, Mr. Chairman, I have no additional questions at this time, and would yield back.

Mr. MURPHY. Would the gentleman hold for a moment?

All right. I'll recognize myself for another 5 minutes, just follow up while the other Members are preparing their comments here.

For Ms. Giles, it remains unclear how VW's going to fulfill the ZEV investment commitment under the terms of the partial consent decree. And nothing prevents VW from obtaining revenue from these investments. That's one of our bottom-line concerns. Can you point to some other examples in EPA settlements where—or enforcement actions that permit the party responsible for a violation to establish a new business or generate revenue as part of the settlement? Is there other models for this that you have?

Ms. GILES. Every case has remedies that are uniquely tailored to the facts of that particular case. In this case, this is a part of the injunctive relief, it is not a penalty, it's part of the injunctive relief, it's an investment that VW is making in ZEV infrastructure. And there is no prohibition on them earning revenues from that investment.

Mr. Murphy. Well, do you know if VW does, in fact, intend to pursue any revenue regeneration from these investments? Has that

been part of your discussion?

Ms. GILES. I don't know the answer to that question. It will be a decision that the company makes. I would say that some of the comments that we have heard from other companies in this business seem to be encouraging that VW should be making revenues from these investments.

Mr. Murphy. So it would seem to me that would be part of the discussion, that if someone is being penalized but that penalty is going to allow them to actually make money, that would seem to be a bit of a contradiction and part of a discussion you might want to have with them.

Ms. GILES. We would certainly agree if this were a penalty. This is not a penalty. This is part of the injunctive relief. The penalty portion of the case is still underway.

Mr. Murphy. So—and I understand you can't discuss all those things, but just clarify for me. If there is a penalty, will that—is one of the options a fine?

Ms. GILES. Yes. That—yes. It is.

Mr. Murphy. And where will that money go if there's a fine?

Ms. GILES. It goes to the Treasury. Mr. MURPHY. Does it go to the EPA?

Ms. GILES. No, it does not.

Mr. Murphy. So you have no say-so at all on how that money is spent?

Ms. GILES. The money goes to the Treasury.

Mr. Murphy. OK. And now some have suggested this could also have a negative or anticompetitive effect on the existing ZEV infra-

structure. Do you agree?

Ms. GILES. We've heard a variety of opinions. Some of the people who are active in ZEV infrastructure think this is going to be a boon for this industry. Some are concerned about what the impacts could be. We have worked hard at trying to put sidebars on VW's investments here so that we will do as best we can to help preserve a fair and neutral market. So input from other people into what VW's plan should be, their requirement to be brand neutral, the requirement that it be updated, and the many provisions for public transparency and accountability that the agreement contains.

Mr. Murphy. And I myself have seen some things from one company called EVgo that thinks it might be beneficial. Another one called ChargePoint thinks that it could be an antitrust issue. And

so we will have to continue and follow up with those.

Ms. McCabe, by most assessments, the ZEV infrastructure investments under the terms of the partial consent decree will most likely be into electric vehicle infrastructure such as charging stations. Do you agree that's the most likely thing, the charging stations?

 $Ms.\ McCabe.$ We expect that to be significant. Mr. Murphy. Is the Office of Transportation and Air Quality aware of the size of the electric vehicle charging market? Can you tell us what that is?

Ms. McCabe. I don't have a specific number for you, Congressman. But there's clearly a lot of interested inquiry in this from Members of Congress themselves about it. And we've got a big country here with a lot of people to serve.

Mr. Murphy. Right. If you could get us that information, because I'm sure that would be of interest to this committee, to you as well, as understanding what that market is and the development of that and how this infrastructure investment might actually directly influence that.

Ms. McCabe, according to an industry filing with the court in the partial consent decree, the market over the next 90 months for installation, operation is approximately \$800 million. You heard us say that. Do you think this is in the ballpark of the market size, \$800 million?

Ms. McCabe. I really wouldn't want to opine on that, Congressman. But we'll provide you answers in follow-up.

Mr. MURPHY. OK. Thank you.

And to both of you, last week the California Air Resources Board, called CARB, held a public input workshop regarding implementation of California's allocation of the ZEV investment commitment. Does the EPA intend to conduct a similar public outreach?

Ms. GILES. VW is required to solicit public outreach. And you may have seen that VW put out a notice, I think earlier this week, saying that it intends to update the public on what the opportuni-

ties for public input are going to be.

Mr. Murphy. I understand. But will EPA conduct this outreach as well?

Ms. GILES. The consent decree puts that obligation on VW.

Mr. MURPHY. Will you have any kind of a role in that as well in how that data's collected, collated, responded to? Will you be there at the table in any way, or you'll wait for their report?

Ms. GILES. VW's obligations under the consent decree are to conduct that outreach in accordance with a public outreach obligation. And we're going to make sure, through our oversight of the consent decree implementation, that they do comply with those obligations to conduct public outreach and to consider that in the development of their plan.

Mr. MURPHY. Thank you. Thank you. I'm out of time.

Mr. Kennedy, are you ready for questions?

Mr. Kennedy. Yes.

Mr. Murphy. I'll recognize you for 5 minutes.

Mr. Kennedy. I appreciate that, Dr. Murphy. Thank you.

Ms. Giles, I understand that the Zero Emission Vehicles provisions of this settlement were designed to remedy some of the adverse environmental effects of VW vehicles emitting excess pollutants into the atmosphere. Is that correct?

Ms. Giles. Yes.

Mr. Kennedy. So the ZEV provision mitigates these harmful environmental effects by encouraging the development of clean technology. Is that right?

Ms. GILES. That's correct.

Mr. Kennedy. And a district court approved the settlement and said that it was substantively fair and would, quote, "further the purpose of the Clean Air Act." Is that right?

Ms. GILES. That's right.

Mr. Kennedy. OK. So, Ms. Giles, EPA responded to Chairman Upton's request for more information on the settlement agreement in a November 18 letter. EPA's response explains, quote, "The Zero Emission Vehicle investment requirement is not a Government program and is not an argument for any Government program. It is a remedy obtained from a Federal judge by DOJ on behalf of the EPA that partially resolves an enforcement of the case," end quote. So can you explain why this is not a Government program, or what it means that it does not, quote, "augment any Government program"?

Ms. GILES. So under the consent decree, it is VW's decision where and how to implement the investment for ZEV infrastructure. But they must do so within boundaries laid out by the consent decree. So EPA has a very limited role. We are not the deciders on the investment infrastructure. But we are going to oversee VW's conduct here to make sure that they fully and completely comply with the consent decree.

Mr. Kennedy. And my understanding, Ms. Giles, is that those in the Zero Emission Vehicle industry are divided on this aspect of the settlement. Some feel like additional investment in the ZEV industry is welcome, and others fear that VW will be able to unfairly influence the market. Has EPA heard some of those reactions? And

what's your response to those questions?

Ms. GILES. We have heard from a wide variety of people with opinions about this aspect of the consent decree. I would say one thing that all of the commenters have agreed on is that investment in ZEV infrastructure is important and needed. They—I would say the other thing that is common to all the people we have heard from is that they each believe they have the best answer as to what VW should do for the ZEV investments. And we certainly encourage them to take advantage of the opportunity that they will have to provide those points of view to VW through the outreach effort.

And I would say lastly, some of the folks we had heard from about these investments have taken the view that these additional investments will help everyone. As one commenter put it, a rising tide floats all boats.

Mr. Kennedy. Right. Thank you for that.

You note that in your November 18 letter to Chairman Upton that VW remains subject to all Federal and State laws regarding competitive behavior. I believe you say in your letter, quote "If, in the course of making ZEV investments, Volkswagen unlawfully undermines competition in the market, it will be subject to enforcement under antitrust or other competition laws by appropriate State and Federal authorities responsible for overseeing such laws." So do I understand this to mean, Ms. Giles, that there are existing constraints outside the settlement agreement that prevent VW from engaging in an anticompetitive process?

Ms. GILES. So the consent decree does provide that VW has to comply with all laws, Federal, State, and local, including laws about anticompetitive behavior. So if they engage in any such unlawful behavior, they would be subject to—held to account, in the same way any other company can.

Mr. KENNEDY. And what tools or mechanisms are in place to keep VW from pursuing unfair competitive practices when it comes

to meeting those Zero Emission Vehicle obligations?

Ms. GILES. Well, among other things, we have put a number of requirements in the consent decree: that their investments need to be brand neutral, and that their outreach must also be, and that they consider input, and they have an unprecedented level, really, of transparency of information that they are going to be required to provide to the public.

Mr. KENNEDY. Great. Thank you very much.

And I vield back.

Mr. MURPHY. Thank you.

I recognize Dr. Burgess for a second round, 5 minutes.

Mr. BURGESS. Thank you, Mr. Chairman. I just have a brief follow-up.

I was able not to find in the settlement agreement, perhaps you can help me. Is there any stipulation or specificity as to where the power is purchased from that runs the charging station?

Ms. GILES. No, there is not. That is part of VW's investment deci-

sion.

Mr. Burgess. So different parts of country, there will be different availability of nuclear power, wind power, solar power. But the vast majority of it is going to be coal power. Is that correct?

Ms. GILES. Whatever the power source is in the areas that

they're installing the infrastructure.

Mr. Burgess. Does the EPA have a general sense as to—assuming that the bulk of this power is generated from a coal—is purchased from a coal generation plant, what is the impact of that coal that is burned to produce the power to charge the vehicles? I mean, is there some correlation with—I don't even know how much it takes to charge a vehicle. So have you all done any study on this? Do you have a sense of what are the power requirements to charge one of these?

Ms. GILES. Well, VW's going to be looking into that as part of their business investment, just like every other participant in the vehicle infrastructure market. So they will take advantage of the power that's available, and they'll make decisions about where

those infrastructure investments best belong.

Mr. Burgess. Well, but I assume that the EPA has had some experience with this. I mean, you guys have worked on this for a long time. Is there—is there a sense—I mean, we talk about an electric vehicle as being a Zero Emission Vehicle. Some emissions are encountered in the generation of the power, again, unless it's nuclear or solar or wind. But some emissions are encountered with the generation of the power. Do we have an idea of what the tradeoff is? Ms. GILES. Well, this enforcement settlement is about motor ve-

Ms. GILES. Well, this enforcement settlement is about motor vehicles. The whole question of power generation is a different topic

not covered under this consent decree.

Mr. Burgess. OK. I can see I'm not going to get an answer. And, of course, this will probably come—this would be part of the—whatever the penalty phase is. But what is the cost per microliter

of NOx that you would appropriately put into the environment? Does the EPA have a sense of that as what is the appropriate return for the penalty that's encountered, or the infraction that's encountered?

Ms. GILES. There's a variety of factors laid out in the statute about what goes into determining what's an appropriate penalty. And that includes the seriousness of the violation, the egregiousness of the behavior, and many other factors as laid out in the-

Mr. Burgess. Are there many metrics that you can share with us as far as estimates? I don't know even know what the unit is for nitrous oxide released into the environment. Is it microliters per day? Or is it micrograms or nanograms? I don't even know what it is. Can you share that with us?

Ms. GILES. The amount of pollution is one factor, but it's only one factor that goes into the calculation of a penalty.

Mr. Burgess. But do you know that information, I guess, is what

I'm asking you?

Ms. GILES. The only calculations that I mentioned before are the only calculations we've done with respect to the amount of NOx has been as part of our enforcement action, which is still ongoing, and which is relevant, as we just were discussing, to the calculation of

penalty, and that matter is still ongoing.

Mr. Burgess. But antecedent to this event, had EPA done—I mean, presumably you have done work-I mean, we've been concerned about NOx for a long time. So presumably you've done work on how much is generated, how much was generated from cars 15 years ago, what are the improvements that have been made. Can you share any of that data with the subcommittee?

Ms. McCabe. I'll take that one, Congressman. Certainly over the years, and in doing our clean air work and working with the States, we do lots of estimations and modeling to assess impacts and emissions from motor vehicles and from other sources of pollution, and we develop inventories over time that show improvements from various sectors of the economy

Mr. Burgess. I don't disagree with the improvement. I would stipulate that is a fact. But have we drilled down on the metrics on just what are the—and, again, I don't even know the units that you all talk about. Is it microliters or is it nanoliters? What is the metric that was used?

Ms. McCabe. Generally, parts per billion or micrograms per cubic meter when we're talking about air pollution. NOx is an important pollutant because it's a precursor to ozone, which is measured in parts per billion, or to PM2.5 fine particles as measured in micrograms per cubic meter. And so we do have lots of information about those trends over time and would be happy to answer specific questions about that.

Mr. Burgess. All right. Thank you, Mr. Chairman. I'll yield

Mr. Murphy. Yes, I appreciate your line of questioning because we're just scratching our heads. So if someone has a violation of their individual car, and they're caught by the local law enforcement or the State, and says, "Well, we know you violated the law. We're going to let you choose your penalty, and let us know when

it's done. And by the way, you can supervise yourself. And it's OK if you open up a store and make money on the whole thing." It just doesn't make sense to us.

Dr. Bucshon, you're recognized for 5 minutes.

Mr. Bucshon. Thank you. Dr. Burgess, in the State of Indiana, 80 to 85 percent of electrical power is generated from coal, so when you plug in your electric car in Indiana, you have to take that into

consideration.

Ms. McCabe, Ms. Giles' response to the committee's November 1 letter on the ZEV investment, she highlighted the stakeholder outreach VW's required to conduct under the terms of the partial consent decree has a means for ensuring transparency and accountability in VW's investment decisions. The response stated, and I quote, "EPA intends to ensure Volkswagen conduct a robust process for public input and accept comment from relevant stakeholders before decisions are made. However, under the terms of the partial consent decree, VW is only required to seek input from States, municipal governments, federally recognized Indian tribes, and Federal agencies. And is under no obligation to act upon the suggestions it receives in the course of this outreach." So the question is: Are States, municipal governments, Indian tribes, and Federal agencies the only stakeholders relevant to EV infrastructure investments?

Ms. McCabe. No. And VW, I believe, is conducting very broad outreach. They're making it broadly available so that any and all

parties have the opportunity to weigh in.

Mr. Bucshon. OK. Does the EPA expect VW to conduct outreach or accept input from, as you just said, other interested parties, even if they're not specifically required to under the terms of the partial consent decree? I guess you just answered that question. If so, how does the EPA intend to enforce this if your role is limited to determining whether the company satisfied the requirements of the partial consent decree?

Ms. GILES. So I believe VW has recently announced their plan to make the input available to all who are interested to comment. So

we are expecting that is what VW will do.

Mr. Bucshon. OK. And if VW is not required to act on the comments received from the stakeholders, how does this stakeholder outreach provide any accountability? I mean, if people can comment but there's—it doesn't make any difference, I mean, it's fluffiness, right, that they took comments but they really don't have to don't have to act on them or consider them, really.

Ms. GILES. Well, the consent decree actually does say that not only do they have to solicit comment, but they have to consider it, and they have to describe in their plan how they considered the input.

Mr. Bucshon. OK. Thank you.

I vield back.

Mr. Murphy. The gentleman yields back.

I now recognize the ranking member of the committee, Ms. DeGette.

Ms. DeGette. Thank you, Mr. Chairman. And thank you very much for your comity. The Democrats were all in a meeting with Vice President Biden this morning. And as often happens with the Vice President, he was extremely late. His excuse was that he was in a meeting with the President. So

Mr. Murphy. If I had a dime for every time I heard that.

Ms. DEGETTE. I know. We were forced to accept it. So thank you very much, and thanks to our witnesses.

I'll ask unanimous consent to put my opening statement into the

Mr. Murphy. Without objection.

[The prepared statement of Ms. DeGette appears at the conclu-

sion of the hearing.]

Ms. Degette. And I also do have a few questions. I think we need to really put today's hearing into context. Let's remind ourselves that what VW did that necessitated legal action, and what the overall settlement was intended to accomplish.

Ms. Giles, last year, it was discovered that VW installed defeat devices in various models that were emitting up to 40 times the

NOx levels allowed by law. Is that correct?

Ms. GILES. That's correct.

Ms. Degette. And also, there were about half a million of these vehicles that were outfitted with these defeat devices, many of which are still on the road today. Is that correct?

Ms. GILES. That's right.

Ms. Degette. Now NOx, one of the reasons why we regulated it is, it's a harmful pollutant to human health. Is that correct?

Ms. Giles. Yes.

Ms. DEGETTE. And, Ms. McCabe, you're nodding also.

Ms. McCabe. Yes.

Ms. DEGETTE. So here's my understanding of the partial settlement with VW. After discovering this massive cheating scheme, the Obama administration brought multiple parties to the table, including VW, the State of California, and the Federal Government, and they reached a partial settlement. This was approved by the Federal judge in October, and it will result in VW spending nearly \$15 billion over the next decade. So I want to go through some of the key components of this agreement.

Ms. Giles, the settlement requires that VW remove from commerce or modify at least 85 percent of the 2.0-liter vehicles that are

still polluting the air. Is that correct?

Ms. GILES. That's right. VW is required to offer all the consumers buyback or a fix, if one is approved, and damages for consumer harm.

Ms. DEGETTE. And that part of the settlement which is designed to get the cars off the road and also to make consumers whole, that's the bulk of the deal. But that's going to cost about \$10 billion to VW to accomplish that, correct?

Ms. GILES. That's the estimated amount, yes.

Ms. Degette. And the other provisions of the settlement are intended to try to reverse the damage these vehicles caused to the environment. One provision mandates that VW spend nearly \$2.7 billion to fund a mitigation trust fund to mitigate the excess air pollution from the 2-liter vehicles. And the other remaining part of the settlement requires that VW invest \$2 billion into Zero Emission Vehicles. Is that correct, Ms. Giles?

Ms. GILES. That's right.

Ms. DEGETTE. So the bulk of the settlement is either dedicated to fixing or replacing the cars, to stop the ongoing harm, and then about a third of the settlement is designed to mitigate or reverse the damage that these vehicles have already caused, or will continue to cause. That's the crux of the agreement. Is that right?

Ms. Giles. Yes. It is.

Ms. Degette. That seems pretty reasonable to me.

And, Mr. Chairman, I'm really happy that you're having this hearing, because I think we should have meaningful oversight to ensure that VW adheres to the terms of the settlement. I've got to say, you know this, Mr. Chairman, but when this first broke, I went out to one of my local dealerships in Denver. And I looked at these cars and I saw the—I mean, I'm no mechanic, but I saw what the situation looked like, and I was dubious at that time about what, if anything, could be done both to mitigate the harm to the consumers, and also to mitigate the damage to the environment.

So I think this is a pretty good compromise. And we should—we should continue to oversee this to make sure that both that the consumers are made whole and that the environment is protected.

I think this is probably our last hearing in this Congress, Mr. Chairman. And I just want to say we've had a lot of productive conversations, particularly among our mental health hearings that we had earlier in this Congress. And I know we worked together, sometimes in a little more contentious way than others. But in the end, we were able to work on that mental health bill that became part of 21st Century Cures. And I just want to thank you for your chairmanship. I don't know what you're going to be doing in the next Congress. But I've enjoyed, and I've also—I know my Members aren't here, but we have the A team over here on this side of the aisle, and we've had a good session. So thank you, Mr. Chairman. I yield back.

Mr. Murphy. Thank you for your comments. I also want to say that the work you and Chairman Upton did on the 21st Century Cures is remarkable but predictable in terms of dedication that took place and the bipartisan work in this full committee that both the mental health bill and that bill came through this committee unanimous. And we're going to see the Senate vote on it tonight. And I think we'll see a strong vote there and on to the President's desk. It's going to make a big difference. And a lot of that stemmed out of the work of this subcommittee. So I thank you for your great

work.

Mr. Flores, you're recognized for 5 minutes.

Mr. FLORES. Thank you, Mr. Chairman.

Ms. Giles, Ms. McCabe, you've talked anecdotally about the comments of the other parts of the ZEV industry with respect to the ZEV investment by VW. What detailed analysis did the EPA do to take a market that's just starting, and then to jam \$2.7 billion into it. What detailed analysis did the EPA do to see what impact that would have on the market?

Ms. GILES. So you're referring to the ZEV investment?

Mr. FLORES. Correct.

Ms. GILES. So the \$2 billion ZEV investment, what we have heard from other people that are in this market—

Mr. Flores. What detailed analysis did you do?

Ms. GILES. We did not do a detailed-

Mr. FLORES. OK. That's fine. You didn't do a detailed analysis.

Ms. GILES. Our purpose-

Mr. Flores. So my question is this: Does it make sense to rigorously study this important question before requiring a defendant accused of cheating customers and the U.S. Government to flood a growing market with \$2 billion of capital?

Ms. GILES. So we—as you are aware, we put a number of provisions in this consent decree that are designed to put sidebars on

VW's behavior-

Mr. Flores. No, that's not the question. The question is: Doesn't it make sense to do some sort of detailed analysis on the market that you're getting ready to impact? Does it or does it not?

Ms. GILES. We think that it makes sense to have VW, who is a player in this market, to make investment decisions consistent-

Mr. Flores. So the cheating company gets to make all the investment decisions, and the EPA says, Oh, well, we got some anecdotal evidence. We didn't do any detailed study. We're going to just impose this on the market and just hope it turns out OK. Hope that VW does it a good way.

Ms. GILES. That is not how we perceived it.

Mr. Flores. Well, that's the way the American people are going

to perceive it.

All right. Moving on, EPA is currently conducting midterm evaluation on the fuel economy and emission standards for light duty vehicles. These so-called CAFE and GHG standards require annual increases in fuel efficiency reaching 54.5 miles per gallon by 2025. A nearly doubling over current fuel efficiency. At a September hearing before this committee, you informed us that these standards could be met without a substantial increase in the electrification of the Nation's vehicle fleet. Is that correct?

Ms. McCabe. Yes. I did.

Mr. Flores. OK. Just last week your agency issued its proposed conclusions to its midterm evaluation of these standards. And in it, your agency essentially says that automakers are on track to meet the greenhouse gas standards, and that no relaxation of targets in the outyears is necessary. Is that also correct?

Ms. McCabe. That's correct. Mr. Flores. OK. So if the EPA believes that greenhouse gas standards for vehicles can be met without more electric vehicles, then what is the purpose of the electric vehicle provisions in the VW settlement?

Ms. McCabe. Well, the greenhouse gas standards and the fuel economy standards set in 2012, projected out until 2025, are reasonably affordable and-

Mr. Flores. Yes. We all got that.

Ms. McCabe. OK. That doesn't mean that that's all and everything that the transportation sector or that the automotive industry intends to do. And there's a great desire, both in the automotive industry, and in places like California and other places around the country, for increasing technology innovations in the electric vehicle space and other zero emitting vehicles. And so it's entirely appropriate for those activities and those technologies to continue to develop, even if they may well go beyondMr. FLORES. OK. All right.

Ms. McCabe [continuing]. The reductions achieved by the 2012 rule.

Mr. Flores. And so EPA stated in that same September hearing that automakers are meeting all standards—meeting standards and will continue to meet them thanks to efficiency improvements and conventional internal combustion engines vehicles. And they expect these improvements to continue. Yet the VW settlement clearly forces VW in the direction of investments in electrification. So is there a risk that the agency is simultaneously pushing automakers in two directions at once, and that splitting company resources between the internal combustion engine efficiency improvements and electrification investments may not be the best long-term strategy?

Ms. McCABE. I don't see that this puts the automakers in a difficult position at all. They're moving forward with advanced gasoline engines. They're moving forward with investments in electric vehicles. And the market wants both of those.

Mr. FLORES. OK. Thank you, Mr. Chairman. I yield back.

Mr. Murphy. The gentlemen yields back. I now recognize Mr. Tonko for 5 minutes.

Mr. Tonko. Thank you, Mr. Chair.

And welcome to our guests, and thank you for your good work. As you know, VW was accused of installing cheating software on more than half a million of its vehicles. This has resulted in harms to both the environment and consumers in upstate New York and, indeed, across the country. Owners of VW's noncompliant vehicles are now stuck with cars they believed to be clean diesel, or lower-emitting vehicles. Now these consumers' vehicles have to be modified or taken off the road altogether. The rest of the public has also been harmed by the excessive pollutants these vehicles put into the air.

Ms. Giles, Appendix D of the partial settlement requires VW to establish a \$2.7 billion environmental mitigation trust fund, which will be administered by an independent trustee. Is that correct?

Ms. GILES. That is correct.

Mr. Tonko. Ms. Giles, the EPA has stated that the purpose of this fund is to support actions that will replace certain diesel emission sources with cleaner technology. This will reduce excess NOx emissions by the violating 2.0-liter cars.

So, Ms. Giles, can you give us more information on the reasoning behind this mitigation trust fund?

Ms. GILES. Yes. The mitigation trust fund was set up, as you mentioned, for the purpose of reducing NOx emissions in the future, and it will—it sets up a fund that is administered by a trustee, and allocates funds to individual States for them to make decisions about what types of pollution reductions make sense for their State

So they will apply to the trustee for funding on a public process with a lot of transparency, and the trustee will make the decision.

Mr. TONKO. So, in your opinion, is there a greater value that these environmental mitigation projects have than simply having VW write a large check to the U.S. Treasury?

Ms. GILES. Absolutely. So the purpose of mitigation is to make up for the pollution that they caused by their violations. And we think the mitigation trust, combined with the provisions for ZEV and the provisions for remediating the cars and getting the polluting cars off the road, will achieve that objective.

Mr. Tonko. I understand that all 50 States, the District of Columbia, Puerto Rico, and federally recognized tribes, can poten-

tially qualify for mitigation projects. Is that correct?

Ms. GILES. That is correct. They have the election, whether they

wish to participate or not.

Mr. TONKO. OK. Thank you. And, Ms. Giles, each participating beneficiary will receive an allocation of funds from that total, \$2.7 billion, based on the number of registered illegal VW vehicles within the boundaries of the beneficiary. Is that correct?

Ms. GILES. That is correct. And so in the case of New York, that's

about \$117 million.

Mr. TONKO. So a State like New York then would be—which is likely more impacted by noncompliant vehicles than a small State, would receive more money. Is that correct?

Ms. GILES. The money is, as you said, roughly allocated based on

where the unlawful vehicles are registered.

Mr. Tonko. And, Ms. McCabe, I understand that possible mitigation projects could include, for example, efforts to reduce heavy-duty diesel sources near population centers, or even heavy-polluting school and transit buses. Is that correct?

Ms. McCabe. That is correct.

Mr. Tonko. OK. And what other projects might we expect to see

qualify for some of these moneys?

Ms. McCabe. Well, the document lays it out very specifically, so that this will be straightforward for the States to implement and for the trustee to oversee. So projects such as school buses, heavy-duty vehicles, equipment in ports that emit large amounts of NOx, these are very common sorts of equipment that can take a lot of resources to replace or retrofit. So these will have tremendous benefits in terms of reducing NOx.

Mr. Tonko. And to either of you, when can States begin applying

for this money and what is that process going to look like?

Ms. GILES. As soon as the trustee is selected and the trust documents are finalized, the beneficiaries can register. And then there's a process laid out in the consent decree to begin applying for funding.

Ms. McCabe. And, Congressman, if I might add——

Mr. Tonko. Sure.

Ms. McCabe [continuing]. We've been doing a fair amount of outreach to our State partners, so that they understand and can ask all the questions that they might have about the process, so they don't miss any opportunities and they're ready.

Mr. Tonko. Have you had any interaction, any feedback from the States, or any of the beneficiaries in terms of the process you're

doing, you're incorporating?

Ms. GILES. Yes. States have been very supportive of the amount of information we're providing and the ability to ask questions and to fully understand what their opportunities are.

Mr. Tonko. And, Ms. Giles, earlier you were asked about conducting analyses as a prerequisite to dealing with this issue, and

I got the sense you had more to share with us.

Ms. GILES. I did. So our intention on this was to put boundaries around what the behavior is that VW can engage in as part of the ZEV investment, so that we do protect the market. So the requirement to solicit input, the requirement to be very transparent, to collect and make data available, to be brand-neutral, to update the plan, all of these requirements are going to be constraints on VW; and EPA is going to be watching very closely to make sure that VW does comply with all of those requirements.

does comply with all of those requirements.

Mr. Tonko. Well, let me conclude by thanking EPA and this administration for its outstanding work to bring this matter to a conclusion, and make both the public and the environment whole.

And with that, Mr. Chair, I yield back.

Mr. Murphy. Thank you. The gentleman yields back.

I recognize the gentleman from Oklahoma, Mr. Mullin, for 5 minutes.

Mr. Mullin. Thank you, Mr. Chairman.

And thank you both for being here. Obviously, we wish neither one of you guys had to be here with Volkswagen, and we understand the circumstances we're in. But, obviously, we're here to discuss, you know, about the penalties that are being assessed, and how they're being assessed. And I don't know which one wants to take the answer, so I'll just kind of ask it.

The authority to assess the ZEV, I guess—is that how we're pronouncing it?—penalty was based, according to you-all's testimony about the Clean Air Act, that you guys had the authority to assess

it through the Clean Air Act. Is that correct?

Ms. GILES. That's correct. But let me just clarify. It's not a penalty. What we have done under this partial consent decree is to fashion a remedy for the harms caused by VW's violations of the Clean Air Act.

Mr. Mullin. So that would be considered a fine?

Ms. GILES. No. The penalty portion of the case is not yet completed. All that has been done so far is what we call the injunctive relief. So what does the company have to do to address the cars on the road and to compensate for the harms and pollution it caused through its violations?

Mr. Mullin. So I guess the question that I have then is, where does that authority come from through the Clean Air Act? I mean, that's kind of a broad explanation that you get the authority through the Clean Air Act. I guess, I'm kind of curious of how Congress has delegated you to do that through the Clean Air Act?

Ms. GILES. So the Clean Air Act lays out specific requirements,

and EPA is tasked with enforcing.

Mr. Mullin. What are those specific requirements?

Ms. GILES. Requirements to meet the standards that are set

forth for cleaner cars in this particular instance.

Mr. Mullin. But I mean where—I get that, but where does it give you authority to have such a massive penalty or fine, or whatever you want to call it, to VW? I'm not saying they're in the right or the wrong. I'm not defending VW's actions. I'm just concerned here that the EPA is maybe reaching a little far underneath the

powers that were delegated to you by Congress, and I just—I don't want to use a broad sweep here, and I'm really trying to under-

stand where you're coming from.

And, by no means, think that I'm trying to ask you a got-you question or anything. I really am—under what I've read, the letter that you responded back to this committee, it was very vague, and I'm not understanding exactly still yet where you come up with the authority to be able to assess whatever you want to call this. But either way, it's a fine or it's a penalty, because it's to remedy their emissions that they lied about, and it's somehow supposed to offset that, according to your letter.

Ms. GILES. Well, the DOJ filed a complaint on our behalf, which lays out the violations of the Clean Air Act that VW committed by its conduct in this matter. And the Clean Air Act also gives EPA the authority to take enforcement actions to remedy violations of

the Clean Air Act, and that's what we've done here.

Mr. Mullin. But through the ZEV Act, to say that you have a \$2 billion deal where they're supposed to invest in infrastructure, and then a \$2 billion fine that was supposed to equally offset—according to the provisions of the settlement, that's intended to address the adverse effects of VW's violation on the quality by supporting the technologies that are actually clean. The first \$2 billion was supposed to fully offset those emissions.

The second \$2 billion for the infrastructure investment, what is

that offsetting?

Ms. GILES. So the settlement contains three elements to remedy the violations of VW here: First is getting illegal cars off the road; the second is making up for the pollution they caused; and the third is to invest in clean vehicle technology to address the harms from selling dirty vehicles, claiming they were clean.

Mr. Mullin. That third one is the one that I'm having a problem understanding. Where did we delegate you the authority to say

that they have to invest in that technology?

Ms. GILES. The authority is to enforce the terms of the Clean Air

Act and to fashion remedies that address violations.

Mr. MULLIN. That is without question. But to say that the \$2 billion is supposed to invest in technology is specifically what you said. The third was to invest in technologies. Where does the Clean Air Act give you authority to force a company to invest in clean technology? I don't think you find that in the Clean Air Act.

Ms. GILES. What the Clean Air Act does is gives us authority to fashion remedies to fit the circumstances of each individual case.

Mr. Mullin. Remedies. But investing in an infrastructure is totally different, and I think that's where we are outside the scope. And I appreciate what you guys are trying to do here, but I really feel like that this is outside the EPA's authority to be able to force a company to invest in clean technology. That's over and beyond what the Clean Air Act authority gave you.

I yield back, Mr. Chairman. I'm sorry, I'm out of time.

Mr. Murphy. The gentleman is out of time, yes.

Ms. DeGette, you had a quick comment?

Ms. DEGETTE. I just want to say a couple quick comments in closing. Number one, this was not the EPA forcing VW to do this. It was part of a settlement that both parties agreed on.

Correct, Ms. Giles?

Ms. GILES. That is correct.

Ms. DEGETTE. So VW agreed this would be something they could do proactively to begin to mitigate this.

Ms. GILES. That's right.

Ms. DEGETTE. Mr. Chairman, I just want to—now that we do have these two witnesses today, I already told you about how I en-

joyed working with you and the committee this year.

I also want to tell these two EPA witnesses that I think we've made extreme advances with the EPA the last few years. And Congress hasn't always been a willing partner, but I think that creative thinking and cooperation is really what we need, moving forward, in making sure that we enforce our environmental regulations.

When I talk to my constituents, what they want is they want clean air, they want clean water, they want safe drinking water. And your agency always gets vilified, but, actually, you're trying to achieve those goals for the American people. I just want to say thank you.

And I yield back. Thank you.

Ms. GILES. Thank you.

Mr. Murphy. The gentlelady yields back.

And we all share those concerns too.

Let me just say this is our last hearing of this session for this Subcommittee on Oversight and Investigations. I want to thank all the members of this committee on both sides of the aisle for their dedication. We have had some remarkable hearings, provided some tremendous oversight, and shined a bright light on many Federal agencies and companies out there, and I think that's been to the great benefit of the American people. It's been an honor to serve as your chairman.

In conclusion, I ask unanimous consent that the contents of the document binder be introduced into the record and authorize staff to make any appropriate redactions. Without objection, the documents will be entered into the record with any redactions the staff

determines are appropriate.

[The information appears at the conclusion of the hearing.]

And I want to thank the witnesses today and the Members that are here that have been part of today's hearing. And I remind Members they have 10 business days to submit questions for the record. We'll have some other questions for the record we'll submit to you, and I ask the witnesses all agree to respond promptly to those questions.

And, with that, this committee is now adjourned.

[Whereupon, at 12:17 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

This is one of the final hearings of the Energy and Commerce Committee in the 114th Congress. Over the last 2 years, we have worked together on several large bipartisan legislative victories, from a permanent SGR fix to TSCA reform to 21st

Century Cures. Unfortunately, I do not believe the Republican majority on this committee has properly prioritized many of the environmental challenges that plague our Nation and our planet.

Today, we have before us two witnesses from the Environmental Protection Agency (EPA). I would like to congratulate both of you on the significant and meaningful environmental accomplishments of the EPA and the Obama administration. And I regret that the Republican majority has not often supported you in these endeavors.

I would like to build upon what others have said about these environmental

achievements:

In 2015, President Obama and the EPA announced the Clean Power Plan, the first-ever national carbon pollution standards for power plants. The Plan armed states with flexible, cost-effective tools to cut carbon pollution from power plants. These efforts could prevent thousands of premature deaths and tens of thousands of childhood asthma attacks by reducing air pollution.

In addition to efforts to reduce air pollution from power plants and vehicles, the Obama administration has updated drinking water standards and taken steps to ensure both urban and rural communities have access to clean drinking water. I'd like

to see us do more in this area by updating the Safe Drinking Water Act.

The Obama administration played a central role in the historic Paris Agreement. The strong international support for this agreement demonstrates the commitment to fight global climate change, adapt to new conditions and to accelerate the shift to a clean energy economy. In addition to this agreement, the U.S. also formed partnerships with a number of nations to reduce global greenhouse gas emissions and transition to renewable energy sources. This includes an agreement with China for both countries to reach targets to reduce greenhouse gas emissions in the coming decades. The U.S. has also dedicated funds to reducing carbon pollution and strengthening resilience in developing nations.

The Obama administration also set new energy efficiency standards for a variety of appliances and equipment. These will result in significant cuts to consumers' electricity bills and will lead to a reduction of more than two billion metric tons of car-

bon emissions by 2030.

And then there's the topic we are here to discuss today: the settlement agreement for Volkswagen's two-liter vehicles. VW has committed to removing harmful vehicles from the road or reducing their emissions by 2019. The company must also fund a \$2.7 billion mitigation trust fund and invest \$2 billion in Zero Emission Vehiclecharging infrastructure and in the promotion of Zero Emission Vehicles. This agreement holds VW accountable for its Clean Air Act violations and secures significant investments for clean air and clean cars.

This list is just a small sample of the environmental accomplishments we have seen in the last 8 years. These efforts are improving air quality, reducing childhood asthma attacks, and reducing premature deaths. They are also creating jobs for American workers and new economic opportunities for American businesses.

A responsible Congress and President would take advantage of this forward progress and continue to build on these efforts. Unfortunately, I fear the next administration will not build man that progress but try to reverse much of it to the

ministration will not build upon that progress, but try to reverse much of it to the detriment of public health and the environment.

The President-elect campaigned on the promises to do away with the Clean Power Plan and to withdraw from the Paris Agreement. He also said that he plans to dismantle environmental rules around coal power, open public lands to oil and gas drilling, and weaken fuel economy standards. Finally, he has vowed to abolish the

EPA, or at least, dramatically limit its ability to regulate.

Unfortunately, I fear that we cannot count on the Republican-led Congress to work with us to stop these destructive plans. House Republicans have passed bills to cut EPA funding, cut research funding for renewable energy, and block implementation of rules that would aid our environment and public health. The Senate Republicans have similarly proposed legislation to cut EPA's budget and block critical environmental regulations.

This is alarming. Every day, we see the signs that climate change is harming the world around us. And the longer we fail to act, the worse the consequences will be. According to a Gallup survey earlier this year, concern in the U.S. about global

warming is at an 8-year high.

We need to send a clear and unambiguous message that we are committed to working with the rest of the world to combat climate change. Such a commitment would help us leave our children a healthy and sustainable planet, and help us embrace the deployment of newer, cleaner and cheaper technology that will grow our

There is so much work to be done, and we cannot afford to take steps backwards.

I again thank both of our witnesses for being here today and for their longtime dedication to protecting our environment. We need committed public servants like you in this fight.

I yield back.

PREPARED STATEMENT OF HON. DIANA DEGETTE

Thank you, Mr. Chairman.

This is the last EPA hearing this committee will hold with the Obama administration.

The EPA has not always received the support it deserves from Congress. Even as the Agency has worked to fulfil its mission of protecting human health and the environment, it has faced criticism and attack.

Despite sometimes unfair opposition, EPA has commendably responded to unprecedented environmental challenges facing the country and the planet. I would like to highlight some of the agency's accomplishments. Under the Obama administration:

• The EPA has helped bring more than 190 countries together to adopt the Paris Agreement, now considered the most ambitious climate change agreement in history:

• The EPA has set new standards to reduce mercury and other pollutants from industrial air pollution, including boilers, cement plants, and large waste incinerators:

 The EPA has enacted the first-ever fuel economy standards for medium and heavy-duty trucks and put in place new fuel standards for passenger vehicles by the year 2025;

• And, the EPA has developed the Clean Power Plan, which will play a major role in reducing carbon pollution and enhancing air quality.

I would like to thank both of our witnesses for your agency's work.

I would also like to commend both of you for your work on the Volkswagen settlement agreement, which we are here to discuss today. I am supportive of efforts to scrutinize this agreement and ensure that VW is held accountable, and I want to ensure that is the purpose of today's hearing.

We are here because of VW's decision to cheat. For years, VW put tens of thou-

We are here because of VW's decision to cheat. For years, VW put tens of thousands of cars on the road that emitted nearly 40 times the NOx levels allowed by law. VW's decision hurt not only its own customers, who thought they were buying clean cars, but all Americans now faced with dirtier air.

The California Air Resources Board, the EPA, and the Department of Justice quickly brought action against VW. Their aim was to both make VW's customers whole and to mitigate the effect that these cars are having on the environment.

The Obama administration recently reached a partial settlement with VW to accomplish a mitigation strategy. The settlement, which addresses only 2.0-liter diesel vehicles, requires that VW spend nearly \$15 billion to settle allegations of cheating emission tests and deceiving customers. It also orders VW to remove from commerce in the United States or perform an approved emissions modification on the vast majority of the affected vehicles. Finally, it requires VW to designate a \$2.7 billion mitigation trust fund to pay for NOx reduction projects and invest \$2 billion in charging infrastructure for Zero Emission Vehicles.

I applaud EPA for its work. They have taken meaningful steps to make consumers whole and reverse the harm that was caused to the environment.

As I said, I support efforts to investigate this settlement. But I believe we cannot fully understand the issues if VW is not represented here. They were the perpetrators of the fraud that necessitated this action in the first place. We need to hear how they will be following through on their new commitments to do right by their customers and the American people. I would encourage the committee to hold a future hearing with VW at the table, possibly joined by some other companies and individuals affected by this settlement.

I want to conclude with a message about the next Congress. As we are all aware, the President-elect has not been supportive of the EPA's mission. He has promised to abolish the agency and to back out of global treaties to reduce greenhouse gases. He has declared climate change a hoax.

These statements should give us pause. There is undeniable proof of climate change. Our planet is getting hotter. Natural disasters are more frequent and more severe. Sea ice is at record lows. We need a strong EPA to address these challenges and to work with our international partners to ensure the whole world takes these problems seriously.

So as this year winds down and we look toward the 115th Congress, it is incredibly important that this committee support the EPA in its critical role. This committee has the tradition of working in a bipartisan way to work in the public interest. This should include addressing environmental challenges before it's too late. I hope we can work together to accomplish this mission.

I thank our witnesses for being here today and for your agency's work. I applaud your work on this settlement to ensure consumers and the environment are protected. And more broadly, I thank the Obama administration as a whole for its work in prioritize environmental issues and make the world safer and healthier for future generations.

Thank you.

Prepared Statement of Hon. Janice D. Schakowsky

Over a year ago, this subcommittee held a hearing after revelations that Volkswagen had cheated on emissions testing and defrauded American consumers. I had several questions in that hearing for Michael Horn of Volkswagen about how quickly its cars would be repaired and how the company would make its customers whole

I would like to follow up on those questions today. Unfortunately, I cannot because—while this is a hearing on a settlement in the Volkswagen cheating scandal-no one from Volkswagen is here to testify. In fact, of the four parties in the settlement (Volkswagen, Department of Justice, California Air Resources Board, and Environmental Protection Agency), the Republican majority only invited the EPA. This should not be our last hearing on the Volkswagen scandal, and I hope the

relevant parties will be better represented in future hearings.

Cheating on emissions test has real consequences for Americans' health. We must hold Volkswagen to account. I want to thank EPA for its ongoing efforts to mitigate the problems caused by Volkswagen vehicles.

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS DOCUMENT BINDER INDEX

December 6, 2016

"Volkswagen's Emissions Cheating Settlement: Questions Concerning ZEV Program Implementation"

Exhibit Number	Document
1	Majority Memorandum for December 6, 2016, Subcommittee on Oversight and Investigations Hearing
2	November 1, 2016, Letter from The Hon. Fred Upton, H. Comm. on Energy & Commerce and The Hon. Tim Murphy, H. Comm. on Energy & Commerce, to The Hon. Gina McCarthy, Administrator, EPA re: ZEV Investment Commitment
3	November 1, 2016, Letter from The Hon. Fred Upton, H. Comm. on Energy & Commerce and The Hon. Tim Murphy, H. Comm. on Energy & Commerce, to The Hon. Gina McCarthy, Administrator, EPA re: NOx Mitigation Trust
4	November 18, 2016, Letter from Cynthia Giles, Assistant Admin., Office of Enforcement and Compliance Assurance, EPA, to The Hon. Fred Upton, H. Comm. on Energy & Commerce re: ZEV Investment Commitment
5	November 18, 2016, Letter from Cynthia Giles, Assistant Admin., Office of Enforcement and Compliance Assurance, EPA, to The Hon. Fred Upton, H. Comm. on Energy & Commerce re: NOx Mitigation Trust
6	October 18, 2016, Amicus Curiae Brief of Chargepoint, Inc. with Respect to Appendix C of Proposed Partial Consent Decree
7	August 5, 2016, Letter from EVgo Services LLC, to Assistant Attorney General, U.S. Dept. of Justice – ENRD
8	December 5, 2016, Letter from EVgo Services LLC, to The Hon. Fred Upton, The Hon. Frank Pallone, The Hon. Tim Murphy, and The Hon. Diana DeGette
9	November 18, 2016, Webinar for Prospective Beneficiaries to the Mitigation Trust Under the Partial Settlement with Volkswagen, EPA

EXHIBIT 1



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-caa-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. 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

³Volkswagen'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. 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." The manufacturer must also justify each AECD and explain why it is not a "defeat device." 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." 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. 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.

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 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." 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. WW must make two additional deposits of \$900 million no later than the first and second anniversaries of the initial deposit. 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	ALLOCATIONS (\$)	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 /d, 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.

2 Id. at App. D-1.

²³ Io

Majority Memorandum for December 6, 2016, Subcommittee on Oversight and Investigations Hearing Page 5

NITTAL SUBACCOUNTS			
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% Mebraska \$11,506,842.13 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 Carol	INITIAL SUBACCOUNTS		ALLOCATIONS (%)
Delaware \$9,051,682.97 0.34% Mississippi \$9,249,413.91 0.34% West Virginia \$11,506,842.13 0.43% Nebraska \$11,500,215.07 0.43% Montana \$11,600,215.07 0.43% Arkansas \$13,495,136.57 0.50% Arkansas \$13,495,136.57 0.50% 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% Kentucky \$1	Wyoming	\$7,500,000.00	0.28%
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% Maine \$20,256,436.17 0.75% New da \$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	District of Columbia	\$7,500,000.00	0.28%
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 \$13,7951,016.23 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% Maine \$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	Delaware	\$9,051,682.97	0.34%
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	Mississippi	\$9,249,413.91	0.34%
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 <td< td=""><td>West Virginia</td><td>\$11,506,842.13</td><td>0.43%</td></td<>	West Virginia	\$11,506,842.13	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 \$19,048,080.43 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% 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	Nebraska	\$11,528,812.23	0.43%
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% Maine \$22,255,715.66 0.82% Newda \$22,255,715.66 0.82% New Hampshire \$29,544,297.76 0.9% 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,	Montana	\$11,600,215.07	0.43%
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 \$	Rhode Island	\$13,495,136.57	0.50%
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 <td< td=""><td>Arkansas</td><td>\$13,951,016.23</td><td>0.52%</td></td<>	Arkansas	\$13,951,016.23	0.52%
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 <td< td=""><td>Kansas</td><td>\$14,791,372.72</td><td>0.55%</td></td<>	Kansas	\$14,791,372.72	0.55%
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 <	Idaho		0.60%
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 <	New Mexico	\$16,900,502.73	0.63%
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% Maryland \$71,045,824.78 <td>Vermont</td> <td></td> <td>0.66%</td>	Vermont		0.66%
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	Louisiana	\$18,009,993.00	0.67%
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	Kentucky	\$19,048,080.43	0.71%
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%	Oklahoma	\$19,086,528.11	0.71%
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%	Iowa .	\$20,179,540.80	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%	Maine	\$20,256,436.17	0.75%
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%	Nevada	\$22,255,715.66	0.82%
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%	Alabama	\$24,084,726.84	0.89%
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%	New Hampshire	\$29,544,297.76	1.09%
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%	South Carolina	\$31,636,950.19	1.17%
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%	Utah	\$32,356,471.11	1.20%
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%	Indiana	\$38,920,039.77	1.44%
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%	Missouri	\$39,084,815.55	1.45%
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%	Tennessee	\$42,407,793.83	1.57%
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%	Minnesota	\$43,638,119.67	1.62%
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%	Connecticut	\$51,635,237.63	1.91%
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%		\$53,013,861.68	1.96%
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%	Georgia	\$58,105,433.35	2.15%
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%	Michigan	\$60,329,906.41	2.23%
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%		\$61,307,576.05	2.27%
Oregon \$68,239,143.96 2.53% Massachusetts \$69,074,007.92 2.56% Maryland \$71,045,824.78 2.63%	Wisconsin	\$63,554,019.22	2.35%
Massachusetts \$69,074,007.92 2.56% Maryland \$71,045,824.78 2.63%	New Jersey	\$65,328,105.14	2.42%
Maryland \$71,045,824.78 2.63%		\$68,239,143.96	2.53%
Maryland \$71,045,824.78 2.63%		\$69,074,007.92	2.56%
	Maryland	·	
	Ohio	\$71,419,316.56	

"INTEAL SUBACCOUNTS	INITIAL 42 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," but EPA or CARB will "review and approve" the ZEV investment plans, among other documents. The National ZEV Investment, overseen by EPA, requires VW to spend \$300 million every 30 months, unless otherwise agreed to in writing by EPA. 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.

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 (ii, 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[.]".

²⁷ Id at 4-5 (Oct. 25, 2016).

²⁸ Id. at App. C, pg. 4.

²⁹ *Id.* at App. C, pg. 6.

³⁰ *ld.* 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.

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.
- <u>December 27, 2016</u>³⁷ VW shall submit the final National Creditable Cost Guidance to EPA, unless otherwise agreed in writing with EPA. (App. C, § 2.2).
- <u>February 22, 2017</u> 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.

EXHIBIT 2

FRED UPTON, MICHIGAN CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515–6115 Majority (202) 225-2927 Minority (202) 225-3641

November 1, 2016

The Honorable Gina McCarthy Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Ave, N.W. Washington, DC 20460

Dear Administrator McCarthy:

We write regarding the Partial Consent Decree in the matter of *In Re: Volkswagen* "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation, Case No: MDL No. 2672 CRB (JSC), particularly with respect to Appendix C and its corresponding terms in the body of the Consent Decree. Judge Breyer approved the Partial Consent Decree on October 25, marking that day as the Effective Date of the Partial Consent Decree.

The Partial Consent Decree requires Volkswagen AG, Audi AG, Volkswagen Group of America, Inc., and Volkswagen Group of America Chattanooga Operations, LLC (collectively, VW or "Settling Defendants") to make \$2 billion in Zero Emission Vehicle (ZEV) investments. Appendix C further provides that the investments shall be made "over a 10-year period to support increased use of Zero Emission Vehicles (ZEV) in California and the United States and may include investments related to ZEV infrastructure, access to ZEVs, and ZEV education." The investments will be split into two distinct plans: one for the State of California, which will receive \$800 million over 10 years; and one for the rest of the United States, which will receive \$1.2 billion during the same time.

¹ In Re: Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation, Case No: MDL No. 2672 CRB (JSC), Partial Consent Decree at 48 ("The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.").

³ Id. at App. C, § 1.2, 1.6.

Under the terms of the Partial Consent Decree, VW must provide a great deal of information to the Environmental Protection Agency in a short time frame. Section 2.3 of Appendix C requires VW to provide a National ZEV Outreach Plan for EPA review and approval within 15 days after the Effective Date. 4 Similarly, VW must submit a proposed National Creditable Cost Guidance to EPA for review and approval within 30 days after the Effective Date. And, within 120 days of the Effective Date or 30 days after the end of the comment acceptance period under the National ZEV Outreach Plan, VW must submit an extensive Draft National ZEV Investment Plan to EPA describing in detail the proposed National ZEV Investments implemented for at least the next 30 months. 6 VW and EPA must meet and confer "as soon as practicable" after this submission, and VW must finalize and submit its final National ZEV Investment plan to EPA for review and approval within 30 days of the meet and confer.7

These tight deadlines are concerning as there remain a number of unanswered questions about the ZEV Investment Commitment and the EPA's role in overseeing the investment. These questions implicate the competiveness of the electric vehicle industry, EPA management and authorities, and the public interest. For example, under the structure of the ZEV Investment Commitment, VW may be able to obtain substantial competitive benefits, if not a monopoly on electric vehicle infrastructure, under the required investments. These investments, in addition, appear to be subject to limited oversight by the federal government. While affected parties raised some of these concerns during the comment period for the Partial Consent Decree and in other briefs before the court, the extent to which EPA and the Department of Justice considered them is unknown.

News reports and company announcements show VW plans a large move into the electric vehicle market in coming years. For example, Fortune recently reported on VW's efforts to reshape the company in the wake of the emissions scandal:

The Volkswagen board made a more substantial move six months later [in June 2016] when it adopted a plan that would reshape the company's core automotive business to focus more on electric vehicles and autonomous driving technology, increase profit margins to 7% to 8% from 6% last year, and possibly sell some of its assets. The company plans to introduce more

⁴ Id. at App. C, § 2.3

⁵ Id. at App. C, § 2.2

⁶ Id. at App. C, § 2.4. ⁷ Id. at App. C., § 2.4, 2.5.

⁸ See e.g., Brian Silvestro, Volkswagen's New Strategy Is All About Electric Cars, ROAD & TRACK, Aug. 6, 2016, http://www.roadandtrack.com/new-cars/future-cars/news/a30278/volkswagens-new-strategy-is-all-about-electriccars/; Kirsten Korosec, Volkswagen Promises Its Next Electric Car Will Be as Revolutionary as the Beetle, FORTUNE, Sept. 6, 2016, http://fortune.com/2016/09/16/volkswagen-paris-teaser/; & Jerry Garrett, Range is All the Rage in Paris, as Electric Cars Steal the Show, N.Y. Times, Oct. 6, 2016, http://www.nytimes.com/2016/10/07/automobiles/autoshow/range-is-all-the-rage-in-paris-as-electric-cars-steal-theshow.html?_r=1.

than 30 all-electric vehicles over the next 10 years with a goal of selling two to three million of these EVs in 2025.9

It appears that, just as the company plans to enter the EV market, it will be consenting to a court-required \$2 billion investment—potentially into its own infrastructure and to support its own newly entered market. This is a curious outcome for the settlement of a cheating scandal.

We seek your assistance in clarifying this situation. We seek to understand the mechanisms of the ZEV Investment Commitment and whether and how the process will protect the integrity and competitiveness of the existing ZEV marketplace. Moreover, it is not clear what EPA's role will be regarding management and oversight of the investment process.

Accordingly, and pursuant to Rules X and XI of the U.S. House of Representatives, we ask that you respond to the following questions by November 15, 2016.

Effect of the ZEV Investment Commitment on the Pre-Existing EV Market

- 1. How does EPA intend to evaluate how projects approved under the National ZEV Investment Plan will affect the existing electric vehicle infrastructure marketplace, including but not limited to any negative effects on existing electric vehicle infrastructure manufacturers or service providers?
- 2. What measures may state or federal authorities take to ensure the ZEV Investment Commitment does not undermine competition in the marketplace or create the opportunity for VW to gain a competitive advantage over other firms in the provision of ZEV infrastructure?
- 3. Under the ZEV Investment Commitment, will VW be able to sell or provide electric vehicle (EV) charging stations or otherwise enter the EV infrastructure market through the provision of such equipment or related services, including through a subsidiary or contract with a single company?
- 4. Manufacturers of some EV charging stations obtain revenue by operating or providing information software and services for these charging stations. Will VW investments under the ZEV Investment Commitment potentially generate revenue for VW or a subsidiary through the provision, manufacture, or operation of software and services?
- 5. Section 1.10 of the ZEV Investment Commitment defines a "ZEV Investment" to include the installation of EV charging stations. Under section 2.6, the Settling Defendants are further obligated to pay maintenance costs for such facilities for at least ten years. Will VW offer these installations at no or reduced cost to the property owner? If yes, please explain how any such offers of no-cost charging stations will affect for-profit businesses

⁹ Kirsten Korosec, Volkswagen Promises Its Next Electric Car Will Be as Revolutionary as the Beetle, FORTUNE, Sept. 6, 2016, http://fortune.com/2016/09/16/volkswagen-paris-teaser.

that are already in the marketplace but not in a position to offer infrastructure to customers at no charge.

Objectives of the ZEV Investment Commitment

- 6. The purpose of the ZEV Investment Commitment is stated broadly in the preamble to Appendix C as "direct[ing] \$2 billion of investments over a period of up to 10 years into actions that will support increased use of zero emission vehicle ("ZEV") technology in the United States."
 - Please describe what EPA believes are the goals for developing infrastructure for the electric vehicle industry in the United States.
 - b. Please describe the current state of investment in ZEV infrastructure and why those investments are expected to be insufficient over the next ten years.
 - c. Please describe the amount of additional infrastructure expected to be developed through the implementation of the proposed ZEV Investment Commitment.
- Under the terms of the National ZEV Investment Plan, VW is "solely responsible for every aspect of selecting the National ZEV investments," subject to review and approval by EPA.
 - a. What criteria will EPA use to evaluate National ZEV investments for electric vehicle infrastructure proposed by VW?
 - b. How will EPA evaluate the need, benefits, and potential utility of National ZEV investments in electric vehicle infrastructure?
- 8. Section 1.10.1 of the ZEV Investment Commitment defines an "infrastructure" investment as one "addressing an existing need or supporting a reasonably anticipated need." Please explain and document the criteria EPA will use to determine whether there is an "existing need" or a "reasonably anticipated need" for proposed infrastructure investments.
- Section 2.5.5 requires the Settling Defendants to include in their National ZEV
 Investment Plan proposal an explanation of how proposed programs and actions will
 "increase access to underserved areas." How does EPA define "underserved areas"?

EPA's Role and Resources in Implementing the ZEV Investment Commitment

 Please provide a detailed summary of EPA's experience in making determinations related to electric vehicle infrastructure.

- 11. In course of implementing the National ZEV Investment Plan, which federal entity will be responsible for engaging with electric utilities to evaluate the potential impacts to grid reliability from electric vehicle infrastructure projects proposed under the plan?
 - a. How does EPA intend to assess this information in its review and approval of projects proposed under the National ZEV Investment Plan?
- 12. Please describe the manner in which EPA will engage and consult, if at all, with other federal agencies with expertise in the areas of EV infrastructure and transportation infrastructure, such as the Department of Energy, Department of Transportation, and the Federal Energy Regulatory Commission (FERC).
 - a. Please detail the involvement of these agencies or other federal agencies in the development of the ZEV Investment Commitment.
 - b. On February 24, 2016, FERC issued an order approving an amendment to a 2012 settlement agreement between the California Public Utility Commission and NRG Energy, Inc. to install a statewide network of charging stations for electric vehicles in California, including at least 200 public fast-charging stations and the infrastructure for 10,000 plug-in units at 1,000 locations across the state. Did EPA consult with FERC about this agreement or any other consent agreements when developing the proposed ZEV Investment Commitment?
- 13. Given the scale of the ZEV Investment Commitment, it would appear that the EPA officials responsible for implementing and administering the program would need extensive experience with the electric vehicle marketplace. Please identify the Agency officials who will have these responsibilities and provide their qualifications.
- 14. Section 1.10.2 of the proposed ZEV Investment Commitment provides that VW may make "investments" in "brand-neutral education or public outreach" but that such investment should not "feature or favor Settling Defendants' vehicles or services."
 - a. Please provide and explain the criteria EPA will use to determine whether investments in such education or public outreach will not "feature or favor" VW's products or services.
 - Please explain why this particular prohibition does not apply to the provision of ZEV infrastructure or services under the ZEV Investment Commitment.
- 15. Section 2.5.3 provides that EPA's approval of each 30-month National ZEV Investment Plan "does not constitute approval of any anticipated costs set forth therein." What is the process for determining whether the Settling Defendants' specific expenditures are proper Creditable Costs? What entities, other than EPA, will have the authority to question whether an expenditure is a proper Creditable Cost?

- 16. Section 2.5.4 requires that the Settling Defendants' National Investment Plan include the locations and types of infrastructure constructed under the plan, the quantities of chargers or fueling stations per site, and the dates by which construction of each site will commence and be complete, among other detailed information. The draft National Investment Plan must be submitted just four months after the Effective Date of the agreement, or 30 days after the end of the comment acceptance period for the ZEV Outreach Plan. Since section 1.10.1 recognizes that most Level 2 charging stations will be installed at "multi-unit dwellings, workplaces and public sites," it appears that the requirements of Section 2.5.4 will require that the Settling Defendants initiate negotiations with all potential Level 2 charging locations within 120 days of the Effective Date of the Investment Commitment. Is this correct? If so, how will EPA ensure that the Settling Defendants provide the required level of detail in the proposed National Investment Plan?
- 17. Section 2.5.7 requires the Settling Defendants to provide in their draft National ZEV Investment Plan an explanation of the extent to which each investment "increases the use of ZEVs in the US." Please explain how EPA plans to evaluate these explanations.
- 18. Under Section 2.7, the Settling Defendants are required to retain a third-party certified public accounting firm primarily for the purpose of auditing and reviewing costs asserted by Settling Defendants to be Creditable Costs. The third-party auditor appears to have the responsibility and the authority to determine whether expenditures are legitimate Creditable Costs. Section 2.8, however, gives EPA the authority to approve or disapprove claimed costs. This creates the potential for a conflict between the third-party auditor and EPA. Please explain how any such differences will be resolved.
- 19. The ZEV Investment Commitment requires EPA to oversee and implement aspects of this proposal, including the overall plan and costs incurred by Settling Defendants. Yet, the proposal does not include any deadlines for EPA to make decisions required by Sections 2.2, 2.3, and 2.5. What are the deadlines for EPA's decision-making under the Investment Commitment?
- 20. The ZEV Investment Commitment requires continuing and detailed oversight by EPA over the full 10-year term of the Commitment. Section 2.1 further gives EPA the unilateral authority to extend the 10-year scope of the ZEV Investment Commitment. Please describe the resources EPA expects to expend in support of its obligations under the ZEV Investment Commitment, including an estimate of the FTE involved.

Public Participation in the ZEV Investment Commitment

21. The ZEV Investment Commitment raises several questions concerning the public's opportunity to have input into EPA's decisions regarding implementation and enforcement of the requirements of the Investment Commitment. Since these authorities of, and obligations on, EPA do not arise from federal law, it is unclear what obligations EPA has with respect to allowing and encouraging public participation in the implementation of the Commitment.

- a. Section 2.2 of the ZEV Investment Commitment requires EPA and the Settling Defendants to "meet and confer as soon as practicable" after VW has submitted the proposed National Creditable Cost Guidance for review and approval. Will this be a public meeting? Does EPA intend to provide any opportunity for public comment on the proposed National Creditable Cost Guidance?
- b. Section 2.4 of the ZEV Investment Commitment requires EPA and the Settling Defendants to "meet and confer as soon as practical [sic]" after VW has submitted the Draft National ZEV Investment Plan for review and approval. Will this be a public meeting? Does EPA intend to provide any opportunity for public comment on the Draft National ZEV Investment Plan?
- c. Section 2.3 of the ZEV Investment Commitment requires the Settling Defendants to solicit input from "interested States, municipal governments, federally-recognized Indian tribes...and federal agencies" on the development of each 30-month phase of the National ZEV Investment Plan. The provision does not, however, require Settling Defendants to solicit input from the general public or from any private-sector organization. Section 2.3 also requires EPA to review and approve the Settling Defendants' National ZEV Outreach Plan. Will EPA require Settling Defendants to include in the National ZEV Outreach Plan provisions for soliciting input from individuals not affiliated with one of the enumerated categories, and from private sector organizations?

We appreciate your prompt responses to this request. Please contact Charles Ingebretson of the majority committee staff at (202) 225-2927 with any questions.

Sincerely,

Fred Upton

Chairman

Subcommittee on Oversight and Investigations

cc: The Honorable Frank Pallone, Jr., Ranking Member Committee on Energy and Commerce

The Honorable Diana DeGette, Ranking Member Subcommittee on Oversight and Investigations

EXHIBIT 3

FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115 Majority (202) 225-2927

Minority (202) 225–2927 Minority (202) 225–3641

November 1, 2016

The Honorable Gina McCarthy Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Ave, N.W. Washington, DC 20460

Dear Administrator McCarthy:

We write regarding the Partial Consent Decree in the matter of *In Re: Volkswagen* "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation, Case No: MDL No. 2672 CRB (JSC), particularly with respect to irrevocable Mitigation Trust and its corresponding terms in the body of the Consent Decree.

The Partial Consent Decree requires Volkswagen AG, Audi AG, Volkswagen Group of America, Inc., and Volkswagen Group of America Chattanooga Operations, LLC (collectively, VW or "Settling Defendants") to establish an irrevocable Mitigation Trust and to make \$2.7 billion available for Eligible Mitigation Actions to "fully mitigate the total, lifetime excess NOx emissions" from the non-compliant VW vehicles at issue in the litigation. Appendix D sets out the form of the Environmental Mitigation Trust Agreement.

According to the Partial Consent Decree, the \$2.7 billion figure is the amount that the parties decided would be at least sufficient to mitigate excess NOx emissions from the "lifetime" of the vehicles. The Environmental Protection Agency presumably calculated this figure to include the amount of excess NOx emissions from non-compliant vehicles operated in the past, as well as the future potential emissions of this class of vehicles.

The committee held a hearing on initial questions about Volkswagen's emissions cheating more than a year ago, on October 8, 2015. At that hearing, Christopher Grundler, the

¹ In Re: Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation, Case No: MDL No. 2672 CRB (JSC), Proposed Partial Consent Decree at 5.

² Id. at App. D.

Director of the Office of Transportation and Air Quality at EPA, testified that the non-compliant vehicles emitted "up to forty times" the allowable limit of emissions.3 He testified further that the agency would be determining the impacts of the excess emissions and would "do whatever we can to serve the committee's work" when asked by a Member to supply the analysis when completed.⁴ Following the hearing, the committee asked EPA to provide a detailed explanation or description of any assessment EPA has conducted to evaluate the real-world effects of these emissions. EPA declined to comment at that time due to the ongoing investigation.5

As the settlement is now final, we write to renew our request. Accordingly, and pursuant to Rules X and XI of the U.S. House of Representatives, we ask that you respond to the following questions by November 15, 2016.

- 1. Please explain the policy considerations that led to the proposal that VW make \$2.7 billion available for Eligible Mitigation Actions.
- 2. Please provide a detailed summary of the calculations used to determine that \$2.7 billion is the appropriate amount that VW make available to Eligible Mitigation Actions. This summary should include the amount of excess NOx emissions from each category of non-compliant vehicles, the approximate number of vehicles in each category, and any other information relevant to the calculation.

We appreciate your prompt response to this request. Please contact Charles Ingebretson of the majority committee staff at (202) 225-2927 with any questions.

Sincerely,

Tim Murphy Chairman

Subcommittee on Oversight and Investigations

cc: The Honorable Frank Pallone, Jr., Ranking Member Committee on Energy and Commerce

The Honorable Diana DeGette, Ranking Member Subcommittee on Oversight and Investigations

 $^{^3}$ 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) (statement of Christopher Grundler, Dir., Office of Transp. & Air Quality, Office of Air & Radiation, Envtl. Prot. Agency).

⁵ Id. at 127-128 (Letter from Nichole Distefano, Associate Administrator, Envtl. Prot. Agency, to Hon. Tim Murphy, Chairman, Subcomm. on Oversight & Investigations, H. Comm. on Energy & Comm. (Mar. 22, 2015)).

EXHIBIT 4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV 1 8 2513

ASSISTANT ADMINISTRATOR FOR ENFORCEMENT AND COMPLIANCE ASSURANCE

The Honorable Fred Upton Chairman Committee on Energy and Commerce U.S. House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of November 1, 2016, regarding the Zero Emission Vehicle (ZEV) investment requirement in the Volkswagen 2.0 liter Partial Consent Decree (CD). I appreciate the opportunity to address the concerns raised in your letter.

The ZEV investment requirement is intended to remedy adverse impacts from Volkswagen's Clean Air Act violations. The company sold approximately 500,000 vehicles in the United States that it claimed were "green," "lower emitting," and "clean diesel" vehicles. Consumers purchased these vehicles on the premise that they were clean vehicles, but we now know that they were not actually clean. The ZEV provision of the settlement is intended to address the adverse effects of VW's violations on air quality, by supporting technologies that are actually clean. The settlement, approved by the Court, requires Volkswagen to invest in the development and use of clean vehicle technologies. The key provisions for ZEV investments that ensure that all Americans will benefit, described in more detail below, include requirements that VW:

- Solicit and consider input from stakeholders, including states, municipalities and other federal
 agencies;
- Make all ZEV investments and outreach brand neutral, so all technologies and interested businesses, as well as consumers, will benefit;
- Update the plan every 30 months, so that the plan adapts to changing technologies and market conditions.

The ZEV investment requirement is part of an enforcement case resolution. The settlement is based on the facts of this case, federal and state law governing liability and remedies, and an urgency to deal with the ongoing excess pollution from the vehicles on the road. In June 2016, the EPA and California lodged a settlement that requires Volkswagen to modify or remove from the roads nearly 500,000 cars that do not meet emissions standards, mitigate lifetime excess air pollution from the vehicles, and offset the broader harm to the clean vehicle market through investments in ZEV infrastructure, access, and education. The public was invited to comment on the lodged CD.

On October 25, 2016, the United States District Court for the Northern District of California entered the CD, and thereby ordered Volkswagen, among other things, to make the ZEV investment consistent with the CD. During the public comment period numerous comments were received. The EPA and the U.S.

Department of Justice (DOJ) considered all the comments that were submitted, including comments specifically addressing the ZEV portion of the agreement. The Court also considered those comments before reaching its decision. After consideration of the comments, the Court found that the CD was fundamentally fair, adequate, reasonable, and in conformance with applicable laws. Specifically, with respect to the ZEV element, the Court stated:

The Court finds the ZEV investment requirement substantively fair. Whereas the Environmental Mitigation Trust seeks to reduce the harm caused by the subject vehicles, the ZEV investments promotes actual environmentally-friendly vehicles. A commitment of investments in such technology furthers the purpose of the Clean Air Act by promoting the research and development of programs that address air pollution. See 42 U.S.C. § 7401(b)(2).

The EPA's Office of Enforcement and Compliance Assurance (OECA) is primarily responsible for ensuring Volkswagen's compliance with the CD, and OECA will work closely with the EPA's Office of Transportation and Air Quality (OTAQ). OECA will also work closely with the Environment and Natural Resources Division of the DOJ as needed to address CD implementation issues. The oversight of enforcement case resolutions is one of OECA's core functions. Other settlements overseen by OECA require mitigation projects, as well as other remedies including major capital projects. EPA enforcement personnel have capably handled these oversight tasks with our allocated budget. The EPA anticipates that will continue to be true as OECA implements this Volkswagen partial CD.

It is Volkswagen's responsibility to make investments consistent with the requirements of the CD. The company will make the decisions on when, how, and where to make the investments, and remains subject to all federal, state, and local laws. Volkswagen may obtain credit toward the overall ZEV investment requirement only where the incurred costs are creditable under the specific terms of the CD.

The EPA will ensure that Volkswagen provides a robust opportunity for stakeholder input into the investment plans before Volkswagen spends any money, and that the company complies with the requirements of the CD. The EPA strongly encourages all interested parties to share their views with Volkswagen through the required stakeholder input process. The outreach provisions of the CD mean that interested parties have a far greater opportunity to provide input than would be the case if the company were making these investments independently for its own business reasons.

The ZEV investment requirement is not a government program and does not augment any government program. It is a remedy obtained from a federal judge by DOJ, on behalf of the EPA, that partially resolves an enforcement case.

The EPA has a limited role with respect to the ZEV investment requirement. In reviewing Volkswagen's submissions under the CD, EPA's role is limited to determining whether the company satisfied the specific requirements of the CD, including the requirement to conduct a robust stakeholder input process. If the EPA determines that Volkswagen has failed to satisfy one or more elements of the ZEV investment requirement, the agency will work with DOJ to address the matter consistent with the CD's

¹ Order Granting the United States' Motion to Enter Proposed Amended Consent Agreement, In re: Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation, MDL No. 15-MD-2672-CRB (JSC) (Oct. 25, 2016, N. D. Cal.).

provisions (which may involve the CD's dispute resolution process and elevating issues to the Court where appropriate).

Volkswagen must develop the National ZEV Investment Plan ("Plan"), and the EPA's role is to review and approve (or disapprove) the Plan as consistent with the specific requirements of Appendix C of the CD. The EPA's limited role will ensure that Volkswagen does what Appendix C requires, including determining, for example, whether the Plan includes the required types of ZEV investments, a projection of Creditable Costs, and explanations and descriptions of activities to provide education and awareness and access on ZEV. The CD specifically requires that Volkswagen's plan be supported, to the extent available, by relevant literature from academia, industry, and government. The CD does not allow the EPA to substitute its preferences for choices made by Volkswagen, but only to determine whether Volkswagen has satisfied the terms of the CD.

The EPA also has a role to review Volkswagen's claimed Creditable Costs. The EPA will first review and approve (or disapprove) Volkswagen's Creditable Cost Guidance and then determine whether Volkswagen will obtain "credit" against its \$1.2 billion commitment for the costs it claims. In exercising its authority, the EPA will consider the conclusions and work product of the Third-Party Reviewer, which will be an independent, certified public accountant tasked to review all claimed costs. Creditable Costs are defined as "costs incurred by Settling Defendants for the planning, installation, operation, and maintenance of a ZEV investment . . . that satisfies the criteria set forth in the National Creditable Cost Guidance." Appendix C-1 requires that Volkswagen's costs be reasonable, necessary, directly connected, and directly allocable in order to be creditable. There are several costs listed in Appendix C-1 that are specifically excluded. For example, entertainment expenses, fines and penalties, general and administrative costs, income taxes, interest and other financial costs, legal costs, pass through costs, disallowed overhead, and trademark costs.

Although there are not established deadlines for the EPA to review and respond to Volkswagen's deliverables under paragraphs 2.2, 2.3, and 2.5, the EPA intends to review and respond to the deliverables as soon as reasonably practicable so that the benefits of the investment may be achieved expeditiously. The EPA's meet and confer process with Volkswagen under paragraphs 2.2 and 2.4, will not include public involvement; the public is generally not involved in such meetings between the parties to a consent decree. However, as explained above, the CD requires, and EPA intends to ensure, that Volkswagen conduct a robust process for public input and accept comment from relevant stakeholders before any decisions are made.

The Committee inquired about EPA's discussions with other federal agencies in reaching this agreement with Volkswagen. Although the EPA cannot provide specific information on the negotiations that led to this settlement, we note that the EPA regularly consults with other federal agencies that have information or expertise on matters that affect EPA's work, and we expect to continue that practice in the implementation of this CD.

The Committee also inquired about grid reliability concerns. The EPA does not anticipate that any such concerns will arise, and notes that each utility is separately governed by a sophisticated structure to address grid reliability. Nothing in the CD relieves any utility of its reliability responsibilities and the EPA fully expects that utilities will be mindful of reliability issues if any arise.

To help ensure Volkswagen's compliance with the ZEV investment requirement, the CD contains a number of features designed to allow stakeholder input into the ZEV investment plan and to ensure appropriate transparency and accountability.

There is a threshold requirement that Volkswagen prepare a National ZEV Investment Plan and a California ZEV Investment Plan. Before the approval of any investment plan, Volkswagen is required to conduct outreach that will specifically solicit input from municipalities, states, federally-recognized Indian tribes, and other federal agencies. In this way, the settlement agreement provides such entities an opportunity to inform the company of viable investment opportunities and other ways in which Volkswagen can maximize this opportunity to support the increased use of zero emission vehicles in the United States. The EPA anticipates that the outreach Volkswagen will do will also allow opportunity for input from stakeholders interested in ZEV infrastructure.

Before the investments begin, Volkswagen must prepare National and California Creditable Cost Guidances in accordance with requirements set forth in the Consent Decree. In short, costs must be reasonable, necessary, and directly connected to ZEV investments. These Creditable Cost Guidances require EPA and California approval. Costs may be credited toward the investment obligation only if they satisfy the applicable Creditable Cost Guidance. These Guidances should help set bright lines to secure compliance with the overall ZEV investment requirement.

In order to ensure transparency, Volkswagen is required to submit annual reports of the investments to the EPA and CARB throughout the 10-year investment period, and post the non-confidential part of the reports on a public website. The annual reports will detail the progress of the ZEV projects and detail Volkswagen's costs for which it seeks credit against the total obligation.

Collectively, these provisions are designed to provide opportunity for stakeholder input, ensure transparency and public accountability for Volkswagen's investment decisions, and ensure that the company meets the requirements of the CD. Volkswagen remains required to comply with all federal, state and local laws as it makes these investments.

Some current participants in the ZEV infrastructure market have expressed concern about the impact of these investments on the market. Competitiveness in the ZEV infrastructure market will help to ensure that investments are thoughtfully made. Volkswagen remains subject to all federal and state laws, including laws regarding competitive behavior. The settlement in no way enables Volkswagen to participate in the ZEV market in a way it, or any other company, could not have done outside any enforcement case, because Volkswagen remains subject to all federal and state laws. If, in the course of making the ZEV investments, Volkswagen unlawfully undermines competition in the market, it will be subject to enforcement under antitrust or other competition laws by appropriate state and federal authorities responsible for overseeing such laws. Specifically, the CD at paragraph 81 states, in relevant part:

Settling Defendants are responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Settling Defendants compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and California, do not, by their consent to the entry of this Consent Decree warrant or aver in any manner that Settling Defendants compliance with the

provisions of the Act, or with any other provisions of the United States, State, or local laws, regulations or permits.

While Volkswagen remains subject to all applicable laws, there is nothing in the CD that prevents Volkswagen from obtaining revenue from ZEV-related investments. Unlike the \$2.7 billion that Volkswagen must place into a trust that will be administered by an independent trustee for the purpose of reducing NOx pollution, the ZEV investment requirement will be a business investment made by Volkswagen. Volkswagen may see a benefit from the mandatory ZEV investments, and that would not be inconsistent with the CD. Volkswagen could have decided to make these investments even without this enforcement case, but now it is required to do so.

The CD includes provisions designed to ensure that Volkswagen's investments do not favor any market participants. Under paragraph 2.5.4 of Appendix C, any charging infrastructure proposed by Volkswagen must be able to service all plug-in ZEVs using non-proprietary connectors. Anyone driving a plug-in ZEV with an industry-standard plug must be able to use it, so that the ZEV infrastructure investments advances the greater ZEV market. Also, under paragraph 2.10 of Appendix C-1, costs to establish or defend trademarks or other intellectual property are not creditable. In addition, the CD requires Volkswagen to invest in "brand neutral" public education about ZEVs. In reviewing whether an investment in education and public outreach is "brand neutral," the EPA will consider the relevant education and outreach materials against the requirements of the CD. As stated in paragraph 1.10.2 of Appendix C, to be "brand-neutral," materials cannot feature or favor Volkswagen vehicles, and if they state that they are "sponsored by Volkswagen" that statement cannot be prominently displayed. As noted above, if the EPA determines there has been a violation of the "brand neutral" requirement, it will work with the DOJ to address the matter.

Again, thank you for your letter. If you have any further questions, please contact me or your staff may contact Carolyn Levine in EPA's Office of Congressional and Intergovernmental Relations at levine.carolyn@epa.gov or at (202) 564-1859.

Sincerely,

(Marthua Wes)

Cynthia) Giles

EXHIBIT 5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV 1 8 2018

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U.S. House of Representatives

Dear Mr. Chairman:

Washington, D.C. 20515

Thank you for your letter of November 1, 2016, regarding the Mitigation component of the Volkswagen 2.0 liter Partial Consent Decree (CD). I appreciate the opportunity to address the concerns raised in your letter.

The violations at issue in this case involve the use of vehicle software that was designed to trigger one set of operating parameters during emission compliance tests and another set of parameters when operating on the road. The primary impact of the cheating software was the emission of substantially more oxides of nitrogen (NOx) from vehicles when on the road than when being tested.

As you know, in addition to requiring Volkswagen to buy back or modify approximately 475,000, 2.0 liter vehicles, the CD also requires Volkswagen to mitigate the harm to the public resulting from the violations. Mitigation is injunctive relief sought by the government to remedy, reduce, or offset past (and in some cases ongoing and future) harm caused by the alleged violations in a particular case¹ and

¹ A court's authority to order mitigation is inherent in the Court's equitable jurisdiction. "For several hundred years, courts of equity have enjoyed sound discretion to consider the necessities of the public interest when fashioning injunctive relief." United States v. Oakland Cannabis Buyers' Co-op., 532 U.S. 483, 496 (2001) (internal citations and quotation marks omitted). Indeed, "the court may go beyond the matters immediately underlying its equitable jurisdiction and decide whatever other issues and give whatever other relief may be necessary under the circumstances. Only in that way can equity do complete rather than truncated justice." Porter v. Warner Holding Co., 328 U.S. 395, at 398 (1946). A district court's equitable authority is at its apex when the public interest is involved. In such cases, a district court's "equitable powers assume an even broader and more flexible character than when only a private controversy is at stake." Porter, 328 U.S. at 398 (citing Virginian Ry. Co. v. System Federation No. 40, 300 U.S. 515, 552 (1937)); see also United States v. Lane Labs-USA Inc., 427 F.3d 219, 231 (3d Cir. 2005) (quoting Porter); United States v. Miami Univ., 294 F.3d 797, 819 (6th Cir. 2002) ("Courts of equity may, and frequently do, go much farther both to give and withhold relief in furtherance of the public interest than they are accustomed to go when only private interests are involved.") (quoting Virginian Ry, 300 U.S. at 552). Statutes like the Clean Air Act that are devoted to, among other goals, protecting public health provide a compelling justification for expansive injunctive relief. Once a violation has been found, "[T]he Court has the responsibility in this case of crafting a remedy that is protective of public health, and this responsibility necessarily takes preeminence over all other

many settlements of Clean Air Act violations require mitigation. The purpose of mitigation requirements in enforcement settlements is to require pollution reductions or other actions that attempt to redress the harm caused by the violating emissions. This is part of the injunctive relief, and is in addition to the usual requirement that the company comply with legal requirements in the future; the mitigation component attempts to redress the harm caused by the past violations and any violations that will continue into the future as the company comes back into compliance.

As is true with most settled cases, the CD is the result of settlement discussions. The amount and the structure of the mitigation provisions were part of the settlement discussions in this case. The EPA cannot discuss specific information on the negotiations that lead to this settlement because that information is subject to a confidentiality order and disclosure of confidential settlement discussions is contrary to the EPA's long-standing policy and practice. In addition, we note that this enforcement action is not complete, as we are still pursuing a remedy for the 3.0 liter vehicles and the penalty phase of this case also remains unresolved. Some of the matters about which you inquire are relevant to those phases of the ongoing case.

However, we can say that this case stands out in that the violations at issue were egregious and aimed directly at evading laws that require control of air pollution. It is appropriate that Volkswagen, not the people adversely affected by the illegal acts, bear the cost to fully mitigate the consequences of the violations. The fact that this case involves mobile sources of pollution also presents challenges in determining where the unlawful pollution occurred.²

The CD includes a mitigation provision worth \$2.7 billion, and directs that the decisions for how these funds are spent be made by the states, tribes, the District of Columbia, and Puerto Rico (Beneficiaries). The CD lists the projects that are eligible, and the Beneficiaries have flexibility to select the project types and allocations that makes the most sense for their location. To avoid saddling the Beneficiaries with significant implementation costs, the mitigation funds can be used to cover administrative costs of selecting and implementing mitigation projects. The CD also provides that no cost share or match is required for projects related to government owned vehicles and engines, which reduces burden on governments and provides benefits to local communities in addition to the pollution reduction requirements. As you may be aware, some revisions to the mitigation provisions were made in the final CD approved by the Court in response to comments and suggestions from prospective Beneficiaries.

considerations." United States v. Alisal Water Corp., 326 F. Supp. 2d 1010, 1027 (N.D. Cal. 2002) (Safe Drinking Water Act case) (emphasis added).

Without endorsing the methods or the conclusions of the private researchers, we note that there are two published papers seeking to estimate the health impacts of Volkswagen's violations that the Committee may find of interest. See, e.g., Thompson, Carder, Besch, Thiruvengadam, Kappanna, In-use Emissions Testing of Light-Duty Vehicles in the U.S., Center for Alternative Fuels, Engines, & Emissions (May 15, 2014) available at http://www.theicct.org/sites/default/files/publications/WVU_LDDV_in-use_ICCT_Report_Final_may2014.pdf (last visited November 14, 2016); Barrett, Speth, Eastham, Dedoussi, Ashok, Malina, and Keith, Impact of the Volkswagen Emissions Control Defeat Device on US Public Health, 10 Envtl. Res. Letter 11 (October 29, 2015), at http://iopscience.iop.org/article/10.1088/1748-9326/10/11/114005 (last visited November 14, 2016).

Again, thank you for your letter. If you have any further questions, please contact me or your staff may contact Carolyn Levine in EPA's Office of Congressional and Intergovernmental Relations at levine.carolyn@epa.gov or at (202) 564-1859.

Sincerely,

Lintle Mes

Cynthia Giles

EXHIBIT 6

Case 3:15-md-02672-CRB Document 20	25-1	Filed 10/11/16	Page 1 of 16
Douglas A. Winthrop (No. 183532) E-mail:douglas.winthrop@aporter.com Kelly A. Welchans (No. 253191) E-mail:kelly.welchans@aporter.com Arnold & Porter LLP Three Embarcadero Center, 10th Floor San Francisco, CA 94111-4024 Telephone: 415.471.3100 Facsimile: 415.471.3400 Attorneys for Amicus Curiae CHARGEPOINT, INC. UNITED STATES			
NORTHERN DISTR			
SAN FRANCI	ISCO I	DIVISION	
In re VOLKSWAGEN "CLEAN DIESEL" MARKETING, SALES PRACTICES, AND PRODUCTS LIABILITY LITIGATION This document relates to: United States of America, et al. v Volkswagen AG, et al., Case Number 3:16-cv-00295	A C T P H	O APPENDIX Ć ARTIAL CONSE on, Charles R. Bre	INC. WITH RESPECT OF PROPOSED ENT DECREE eyer y): October 18, 2016

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 2 of 16

1

2

3

4

5

6

8

9

10

11

12

13

14

15

16 17

18

19

20 21

22

23 24

25 26

27

28

CORPORATE DISCLOSURE STATEMENT

No publicly held corporations hold more than 10% of the stock of ChargePoint.

INTRODUCTION AND SUMMARY OF ARGUMENT

Appendix C of the Partial Consent Decree orders the Settling Defendants (as defined in the Partial Consent Decree) to invest, over the next 30 months, \$500 million in the zero-emission vehicle ("ZEV") infrastructure market—a market that, without this investment, is estimated to be, at best, only approximately \$800 million over that same time period. Appendix C requires the Settling Defendants to invest an additional \$1.5 billion over the subsequent seven and a half years. Appendix C provides that, with request to these expenditures, the Settling Defendants will be "solely responsible for every aspect of selecting the National [ZEV] investments . . . including timing and locations." Appendix C, at 4. That is, as a remedy for the Settling Defendants' alleged use of defeat device software that increased automotive emissions, Appendix C empowers the Settling Defendants literally to drown out all other participants in the ZEV infrastructure market through enormous spending, made at its unfettered discretion, that is untethered to the normal constraints and financial metrics by which all other market participants must operate. As is evident from the brief of the United States in support of the Partial Consent Decree, which the United States filed after hours on Friday, September 30, 2016, the United States has not given this issue any material consideration. Rather, the United States has focused almost exclusively on the impact of the proposed Appendix C on the market for zero emission vehicles, not the market for ZEV infrastructure. The Settling Defendants, of course, are not concerned with either the impact of Appendix C on the other participants in the ZEV infrastructure market or the overall level of competition in that market.

This Court, however, must be concerned with both, as the Court is tasked with ensuring that the proposed Partial Consent Decree serves the public interest and protects the rights of non-parties. Appendix C, while laudable in its apparent goal of increasing ZEV infrastructure, does neither. To the contrary, as currently written, Appendix C threatens to destroy the competitive market for ZEV infrastructure and, as such, harm participants in the ZEV infrastructure market and disserve the public interest. Appendix C should not be approved in its current form. The Court should require

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 3 of 16

Q

 the parties to modify Appendix C to address the significant concerns raised herein before granting its approval to this aspect of the Partial Consent Decree.

INTEREST OF AMICUS CURIAE

ChargePoint, Inc. ("ChargePoint") operates the world's largest electric vehicle charging network. The company maintains more than 30,000 "Level 2" and "DC fast" charging spots. By charging vehicle batteries more quickly than conventional household outlets, Level 2 and DC fast charging stations allow drivers to reach longer distances without the need for overnight charging. In addition to manufacturing and selling electric vehicle charging stations, ChargePoint also sells various related services, including software as a service applications that permit owners of electric vehicle charging stations to, among other things, decide who charges at those charging stations and determine the price, if any, charged to the driver for a charge. ChargePoint provides services to drivers of electric vehicles. Those services include a mobile application and a network that facilitates access to charging stations wherever electric vehicle owners drive. The company works in close partnership with automakers, including the Settling Defendants.

The ChargePoint business model is to engineer, manufacture, and sell the equipment and network services necessary for electric vehicle charging station owners to effectively provide charging services to drivers that visit their properties. In almost every case, ChargePoint sells charging equipment to an independent site host, who becomes the owner and operator of that charging station. ChargePoint also provides free services to drivers through a mobile app, invehicle navigation, and online. These services allow drivers to easily find and access the electric vehicle infrastructure provided by station owners, track their charging, and receive important notifications, such as if their charging session is interrupted.

ChargePoint is part of a charging industry that is expecting to generate approximately \$800 million during 2017, 2018 and the first half of 2019 (30 months). The industry is highly competitive and dynamic with participants competing fiercely to develop new technologies, including faster charging solutions and wireless charging.

This brief was authored by counsel for ChargePoint at ChargePoint's direction.

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 4 of 16

I

ARGUMENT

The Partial Consent Decree relates to claims that the Settling Defendants illegally manipulated emissions information on their diesel vehicles. As a remedy, the Partial Consent Decree proposes that the Settling Defendants provide \$2 billion in electric vehicle infrastructure to the public. As a percentage of the market, that amount is so large that the performance by the Settling Defendants of their obligations under Appendix C has the potential to drive out all competition in the burgeoning market for electric vehicle infrastructure. The Settling Defendants' performance will also stifle innovation because companies will be unable to afford to invest in new charging products or services when the dominant player in that market gives away its product for free or below cost.

This Court must protect the interests of non-parties to the Consent Decree, such as ChargePoint, as well as the public interest. Accordingly, before any approval of Appendix C, the Court should require changes to it that would address the substantial risk to the ZEV infrastructure market from implementation of Appendix C as presently written.

I. THE CONSENT DECREE, AS PRESENTLY WRITTEN, COULD LEAD THE SETTLING DEFENDANTS TO DRIVE OUT COMPETITION AND OBTAIN A MONOPOLY

ChargePoint must make rational economic decisions regarding the investments it makes, decisions that are driven by market considerations. Chief among them is the anticipated return on these investments, *i.e.*, how the anticipated revenue associated with any particular investment compares to the cost of that investment. This basic calculus forms an essential part of the business decisions for all well-run businesses, including every participant in the growing ZEV infrastructure market. This calculus also creates a highly competitive marketplace responsive to customer needs and marked by innovation. Appendix C turns this calculus on its head. The Appendix C mandate that the Settling Defendants spend, at their unfettered discretion, at least \$2 billion on ZEV infrastructure essentially frees the Settling Defendants from having to make the same rational economic decisions regarding investments that ChargePoint and every other market participant must make. And, with expenditures as significant as those at issue here, the overall effect on the market of that asymmetry will be devastating for the other market players and, thus, the market itself.

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 5 of 16

David Adams, the Vice President of Finance at ChargePoint, explains why this is so in the attached declaration. The Settling Defendants, following standard accounting practices, likely will record a loss reserve for the entire amount agreed to in the Partial Consent Decree—\$16 billion. This means that, as the Settling Defendants deploy, operate, and maintain the mandated ZEV infrastructure, the costs will be recorded against the reserve rather than against current operations. Because the Settling Defendants' profit and loss statements will reflect this loss only once, this means that there will not be any on-going impact on the Settling Defendants' profit and loss statements from its expenditure of \$2 billion. That is, any revenue generated from the ZEV infrastructure expenditures would appear as having no concomitant costs. See Ex. 1, Declaration of David Adams ¶ 9-19.

Appendix C frees the Settling Defendants from the normal constraints associated with return on investment. Faced with no other constraints under the terms of the Partial Consent Decree, and faced with concrete funding obligations, the failure of which results in penalties, the Settling Defendants necessarily would undercut current market participants, none of which, of course, can make investments without incurring current costs and each of which rely on ordinary sales to make a profit and stay in business. Indeed, facing no current costs, the Settling Defendants easily could bring into the marketplace large quantities of ZEV infrastructure for free or at below cost. Placing \$2 billion of such products into the current ZEV infrastructure market threatens the very viability of the other participants in that market and of the market itself. If that happens, the Settling Defendants will have monopolized the business of fueling America's next generation vehicles.

ChargePoint's concerns regarding anticompetitive behavior by the Settling Defendants are not merely theoretical. The United States too had such concerns, for it included provisions in Appendix C to prevent the Settling Defendants from using non-proprietary connectors in the infrastructure it supplies. Appendix C, at 2 & 7. In prohibiting this, the Government recognized that the Settling Defendants might try to engage in anticompetitive behavior by tying its car sales business to the ZEV infrastructure. But "tying" is not the only anticompetitive harm potentially raised by the Partial Consent Decree. Appendix C does nothing to prevent the Settling Defendants' "investment"—really, a donation to potential customers—from crowding out the current market.

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 6 of 16

Q

In other words, the United States took into account anticompetitive behavior as it relates to care sales, but apparently gave no consideration to the market impact of requiring the Settling Defendants to spend \$2 billion on ZEV charging infrastructure. As the United States notes, Appendix C requires that the Settling Defendants consult with "municipalities, states, federally-recognized Indian tribes, and other federal agencies." What is not required, however, is any sort of consultation with those who understand the operation of the ZEV charging market. Memorandum in Support of Entry of Partial Consent Decree at page 19. Indeed, it seems that the impact of this \$2 billion on that competitive market was not even on EPA's radar. In response to comments stating that the Settling Defendants should be required to structure the \$2 billion in order to protect consumer choice and competitiveness, the United States' response is so general as to be meaningless, simply asserting, without citation to any supporting information, that [a]lthough the ZEV investment under Appendix C is expected to be a meaningful addition to the current ZEV landscape, other entities are likely to increasingly engage in ZEV investments in the coming years, allowing for continuing competition in these emerging markets." United States Response to Comments, Exhibit 5, at 12.

To the extent any thought was given to the impact on the market, it was given to the ZEV vehicle market and not the ZEV charging market. "The required ZEV investments are intended to support the burgeoning market in ZEV vehicles by making the necessary technology and infrastructure more available. The Decree explicitly provides that the investments must be neutral among manufacturers and not favor Volkswagen or Audi vehicles over other vehicles." United States Response to Comments, Exhibit 5, at 7. See also, Exhibit 5 at 10 ("Appendix C is intended to credit investments that support the use of ZEVs from all manufacturers, not strictly ZEVs manufactured or sold by Settling Defendant's."). That is, the United States clearly understood that Appendix C could give the Settling Defendants a competitive advantage over other vehicle manufacturers. It just gave no thought to the fact that Appendix C could also give the Settling Defendants a competitive advantage over all other participants in the ZEV infrastructure market.

In fact, the industry players most impacted and undermined by the terms of this Partial Consent Decree have had no real opportunity for input. At best, they have had the opportunity to

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 7 of 16

comment provided by the Clean Air Act, 42 U.S.C. § 7413(g). During notice and comment, ChargePoint objected to the anticompetitive effects of Appendix C, but the Government has not meaningfully responded to these concerns. ChargePoint even offered to meet with the United States in order to explain the economics of the electric vehicle charging industry, and the basis for its concerns, but its offer was declined.

It is important to emphasize how widespread the damage caused by Appendix C could be. To analogize, consider the car-buying market and imagine if the Settling Defendants had been required to provide U.S. consumers with free or reduced price automobiles. Other car manufacturers would suffer; they would have no way to profit by producing cars. But the path of destruction would be significantly wider. Independent car dealerships, which sell the cars at retail to the consumer, would collapse. Relatedly, there would be no need for car-buying services that aid consumers in finding the best price or brand of car that best meets their needs.

Appendix C, as presently written, creates similar hazards. Part of the danger is that the Settling Defendants will supply the entire anticipated electric vehicle infrastructure market with free or reduced-price goods, thereby crowding out other sources of infrastructure. But as with the carbuying market example, this would create other downstream effects. If the Settling Defendants become the sole source for electric vehicle infrastructure, it will stifle innovation in industries designed to support electric vehicle recharging. ChargePoint, for example, does not just supply the physical infrastructure; it also has a network of providers and designs mobile applications that aid drivers in finding an appropriate charging facility for their car.

The twenty-first century may see a rapid shift from the old internal combustion engine to electric vehicles that are more environmentally friendly and more reliable. Today, we would not want a single company supplying gasoline to every station in the country. Likewise, it would not serve the public interest to have a single company defining the products, location or cost of tomorrow's refueling infrastructure.

 Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 8 of 16

II. THIS COURT MUST SEEK MODIFICATIONS TO APPENDIX C BECAUSE, AS PRESENTLY DRAFTED, APPENDIX C CREATES A REAL RISK OF HARM TO THE PUBLIC INTEREST

A district court may approve a consent decree only if it is "satisfied that [the consent decree] is at least fundamentally fair, adequate and reasonable." *United States v. Oregon*, 913 F.2d 576, 580 (9th Cir. 1990). In approving a consent decree, the Court has a special responsibility to protect the public interest and ensure the protection of "those who did *not* participate in the proceedings." *Id* at 581

The major difficulty with Appendix C, as presently drafted, is its complete lack of detail. Appendix C provides (at 4) that the Settling Defendants will be "solely responsible for every aspect of selecting the National [ZEV] investments . . . including timing and locations." This potentially authorizes the Settling Defendants to engage in a wide-range of anticompetitive behavior. The Settling Defendants could produce electric vehicle infrastructure on their own and provide it to customers free or below cost, injuring competition. They could leverage the money spent in the settlement to gain a monopoly on electric vehicle charging and on the provision of ancillary services.

A consent decree "is a form of judgment" and thus "must conform to applicable laws." United States v. Oregon, 913 F.2d 576, 580 (9th Cir. 1990). The anticompetitive potential of the agreement fails to do that. Appendix C requires the Settling Defendants to make about half of their investment in California. Yet, California law seeks to promote competition, customer choice, and innovation in the electric vehicle charging markets. See SB 350 (Ch. 547, 2015). The consent decree creates serious tension with California policy by giving the Settling Defendants absolute discretion in how to spend its \$2 billion "investment."

The lack of detail in Appendix C makes it difficult to understand the full impact of the United States requiring the Settling Defendants to enter the electric vehicle charging market. Among the questions left open: Will the Settling Defendants own electric vehicle charging stations? Will they own a charging network? How, if at all, will the Settling Defendants charge site hosts for placing the Settling Defendants' charging infrastructure in their stations? Appendix C fails to provide any guidance on these and many similar questions.

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 9 of 16

Requiring the Settling Defendants to spend \$2 billion in electric vehicle infrastructure will undoubtedly change this market significantly, and not necessarily for the better. In light of the Court's responsibility to protect non-parties and the public interest, and ensure that the decree conforms to applicable law, the Court should require the United States and the Settling Defendants to modify the consent decree before approving it. The difficulties with Appendix C can be remedied in several ways.

First, the Court could appoint a neutral third-party or trustee to determine how the \$2 billion must be spent. The trustee could prevent self-dealing by the Settling Defendants and ensure that ZEV infrastructure is not purchased in a manner that would threaten the current competitive marketplace.

Second, the funds could be distributed as grants or rebates. A grant or rebate system would facilitate the competitive marketplace because consumers will have the final choice in selecting ZEV infrastructure among a range of providers.

Third, the Court could require that the Settling Defendants sell ZEV infrastructure at fair market rates. This would prevent the Settling Defendants from unfairly undercutting competitors. And, to the extent that it would be unseemly to permit the Settling Defendants to profit from their previous wrongdoing, the Agreement could require the Settling Defendants to disgorge any profits by ordering the Settling Defendants to reinvest them in other areas of the ZEV infrastructure market.

Regardless of the precise method employed, the Court has a special obligation to protect the public interest and, in addition, to protect nonparties from unfair competition. Although Appendix C as presently written laudably attempts to increases ZEV infrastructure, it may inadvertently authorize the Settling Defendants to monopolize this market. Appendix C should be amended to avoid this possibility.¹

In addition to the reasons given in the text, there is a separate basis for additional scrutiny of Appendix C. In its enthusiasm to have more ZEV infrastructure, the United States has improperly used its Clean Air Act injunctive relief authority. First, the statute, as well as the Court's equitable authority, requires a nexus between what is ordered and the harm that was done. Here, EPA admits that it is Appendix D that "fully remediates" the excess NoX emissions that form the basis for EPA's claim. Memorandum for Entry of Partial Consent Decree at 18. Second, the United States justifies Appendix C on the grounds that it is the remedy for "Settling Defendants' deceptive marketing of (Footnote Cont'd on Following Page)

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 10 of 16

CONCLUSION

The United States and the Settling Defendants have reached a settlement that potentially threatens the viability of the electric vehicle infrastructure market. To settle claims that it illegally altered emissions data on its diesel automobiles, the Settling Defendants are agreeing to provide \$2 billion in electric vehicle infrastructure throughout the United States. But allowing the Settling Defendants to flood a competitive market with \$2 billion in goods threatens the survival of the current participants in that market, and thus the market itself. To survive and innovate, these companies depend on their ability to sell electric vehicle infrastructure at a profit. Nor can they afford to sustain \$2 billion in lost sales by the entry of a competitor that can make such investments untethered to normal market constrains. If the Settling Defendants are allowed to enter into the market in this way, within ten years it is very likely that the Settling Defendants will be the only entities in the electric vehicle charging marketplace. Accordingly, the Court should require the United States and the Settling Defendants to modify Appendix C of the proposed Partial Consent Decree as described above.

Dated: October 11, 2016 ARNOLD & PORTER LLP

By: <u>/s/ Douglas A. Winthrop</u>
Douglas A. Winthrop
Kelly A. Welchans

Attorneys for Amicus Curiae CHARĞEPOINT, INC.

22 23

(Footnote Cont'd From Previous Page) (Footnote Cont'd From Previous Page) the subject vehicles as "green." *Id.* at 20. While the United States casts Appendix C as remedying "a broader environmental injury," the injury it points to is not environmental injury at all; it is consumer injury. That is, there is no nexus between the underlying violation and the Clean Air Act injury. ." *Id.* at 10, 22. *Third*, when EPA includes Supplemental Environmental Projects ("EPS") as part of the penalty, it must go through a process to ensure that the SEP is appropriate. See 2015 Update to the 1998 U.S. EPA Supplemental Environmental Projects Policy, March 2015. While this proposal is not technically an SEP, it is one in spirit, and that same scrutiny should be applied to the merits of Appendix C, including, in this case, an economic analysis by a qualified economist.

26 27

1

2

3

5

6

7

8

9

10

11

12 13

14 15

16

17 18

19

20 21

24 25

28

economist.

AMICUS CURIAE BRIEF OF CHARGEPOINT, INC.

MDL No. 2672

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 11 of 16

EXHIBIT 1

	Case 3:15-md-02672-CRB Document 2025-1	1 Filed 10/11/16 Page 12 of 16
1 2 3 4 5 6 7	Douglas A. Winthrop (No. 183532) E-mail:douglas.winthrop@aporter.com Kelly A. Welchans (No. 253191) E-mail:kelly.welchans@aporter.com ARNOLD & PORTER LLP Three Embarcadero Center, 10th Floor San Francisco, CA 94111-4024 Telephone: 415.471.3100 Facsimile: 415.471.3400 Attorneys for Amicus Curiae CHARGEPOINT, INC.	
9	UNITED STATES DIS	
10	NORTHERN DISTRICT	
11	SAN FRANCISCO	ODIVISION
12 13 14	In re VOLKSWAGEN "CLEAN DIESEL" MARKETING, SALES PRACTICES, AND PRODUCTS LIABILITY LITIGATION	MDL No. 2672 DECLARATION OF DAVID ADAMS
15 16 17	This document relates to: United States of America, et al. v Volkswagen AG, et al., Case Number 3:16-cv-00295	
18		
20		
21		
22		
23		
24		
25 26		
27		
28		
	DECLARATION OF DAVID ADAMS	MDL No. 2672

I, David Adams, declare as follows:

1. I am over 18 years of age. I am the Vice President of Finance at ChargePoint Inc. and have personal knowledge of the facts stated herein. If called upon, I could and would testify competently to them. I started my career at the public accounting firm of PriceWaterhouseCoopers and have worked in various finance roles for more than 20 years. I make this declaration on behalf of ChargePoint in support of ChargePoints's Amicus Curiae Brief in the above-captioned matter.

2. I have reviewed Appendix C of the Partial Consent Decree, as well as the comments made by EPA to the Court filed on September 30, 2016. I am knowledgeable about the EV charging marketplace. I have very serious concerns about the impact of Appendix C on competition in the EV marketplace. In spending the \$2 billion, VW will not be subject to the same constraints as every other business that decides to invest in building out EV infrastructure. If that is the case, then VW will be able to use these funds to undercut every other market competitor. If VW is allowed to enter the EV charging market without being subject to the normal financial constraints of a company seeking to enter into a new line of business, in 10 years they will control the EV infrastructure network.

ChargePoint

- 3. Founded in 2007, ChargePoint designs, develops and deploys Level 2 and DC Fast Charging electric vehicle charging stations, software applications and data analytics aimed at creating successful, scalable, and grid-friendly EV service equipment (EVSE). Our innovative and intelligent software platform, known as the ChargePoint network, forms the foundation of this EVSE infrastructure.
- 4. The ChargePoint business model is to engineer, manufacture, and sell the equipment and network services necessary for EV charging station owners to effectively provide charging services to drivers that visit their properties. In almost every case, ChargePoint does not own the hardware. ChargePoint sells charging equipment to a site host. The site host is free to set the price for customers that use the charging station. ChargePoint also provides services to drivers, free of charge, which allow them to easily find and access the EV infrastructure provided by station owners through a mobile app, in-vehicle navigation and on our website.

-1-

6 7 8

 5. ChargePoint is committed to the goal of providing customers with a choice of charging station hardware from multiple manufacturers. Through the ChargePoint OnRamp Program, ChargePoint provides engineering and technical resources to other manufacturers and certifies their EVSE to be compatible with ChargePoint. To date, we have engaged over 12 manufacturers in this program.

6. ChargePoint has 244,000 EV drivers on the ChargePoint network, including more than 125,000 registered users in California. Since our first station was deployed, more than 18.6 million charging sessions have occurred. ChargePoint has more than 6,000 station owners as customers. Our customers are workplaces, governments, hotels, colleges and universities, hospitals, utilities, parking garages, airports, multifamily housing, auto dealerships and other businesses.

The EV Infrastructure Market

- 7. The estimated total market for US charging hardware plus installation is approximately \$800 million during 2017, 2018 and the first half of 2019 (30 months).
- 8. From ChargePoint's perspective, Appendix C would allow VW to threaten and disrupt competitive markets. From the perspective of a market participant that is working every day to offer state-of-the-art equipment and services to meet customer needs and preferences, having VW swamp the market with a \$2 billion spend on EV charging--without any of the discipline that profitability dictates--would ultimately be extremely harmful to market growth, diversification, and innovation, which is driven by customer choice.

Appendix C

- 9. ChargePoint welcomes more investment in the EV business. We also welcome new competition if it is fair and on a level playing field. However, we are gravely concerned that Appendix C jeopardizes the future of existing competitors and the competitive market; that it will lead to less consumer choice; and that it will stifle innovation in the industry.
- 10. Appendix C is unclear about how VW will spend the \$2 billion, and therefore our evaluation of the proposal necessarily requires some speculation on how VW will proceed. The Partial Consent Decree states that how VW spends the money is "solely" in their discretion. Since VW is required to spend the \$2 billion, it does not have to make a profit on selling EV infrastructure

and could give them away for free. The existing competitors cannot compete with free infrastructure.

- 11. Appendix C allows VW to create a short-term business model that is not good for the market or for EV customers. By flooding the market with cheap products, or by picking a single existing competitor to supply a massive amount of equipment, VW could drive out all competition and innovation over the ten-year period.
- 12. One reason VW could drive out other competitors relates to its accounting for the \$2 billion payout. While I cannot be certain how VW will do its accounting, typically a company would record a loss reserve for the entire amount agreed to in the Partial Consent Decree -- \$16 billion -- with the result that the Company's Profit and Loss statements will reflect its loss only once, before any infrastructure is deployed. Investors will recognize the amount, put it behind them and focus on "normal" operations. As the EV infrastructure is deployed, operated and maintained, costs will be recorded against the reserve rather than against current operations with the result that no costs related to the EV charging investment would appear on the company's Profit and Loss statements. Any revenue generated from the EV infrastructure would, however, appear as revenue. This allows VW to have 10 years of revenue generation with no cost.
- 13. An entity not required by a Consent Decree to spend \$2 billion who wants to roll out a similar investment could not compete with VW. In normal operations, the costs of the infrastructure would be capitalized, and depreciated over the 10 years, and both the operating costs and revenue would be recorded in the periods incurred.
- 14. As an example, assume that the cost of EV infrastructure hardware and installation was \$1.5 billion, the cost of the operating the equipment for 10 years was \$500 million, and the infrastructure generated \$700 million of revenue over the 10 years.
- 15. Over the 10 years of the program, VW would record the \$700 million of revenue with no cost, so net income of \$700 million (because the cost was all recorded as a lump sum before the program rolled out). The other entity would record \$700 million of revenue, but \$2 billion of costs, resulting in a net loss over the same period of \$1.3 billion.
 - 16. This means that VW can undercut the existing competition because it will not have

Case 3:15-md-02672-CRB Document 2025-1 Filed 10/11/16 Page 16 of 16

2 3 4

1

5 6 8

9 10 11

12 13 14

23 24 25

> 26 27 28

to consider the cost of investment in making decisions. It can offer its charging stations at a loss or for free. There is nothing in the Partial Consent Decree that prevents VW from behaving in this way.

- Further, Appendix C frees VW from the constraints of having to make rational business decisions. In any typical investment, a company must understand the type of return it would expect to generate, balance those returns against other competing investments, and then make a rational decision on the best way to allocate its resources. In our business, I evaluate projects competing for the same resources (cash, time, focus) and judge which project is the most profitable, moves our business forward the most and is the most efficient use of our capital. In a free market, the need to become or remain profitable would drive a company to make decisions that fulfill the needs of its customers and install an infrastructure that would be highly utilized.
- Appendix C frees VW from the normal constraints as these are "sunk" costs. Instead of a focus on revenue, efficiency and customer satisfaction, VW can focus on whatever will help it the most over the 10 years of the program. Knowing that they can give away the equipment and the cost of charging (because they have already taken a loss on their books), they can decide to push out all the competition (there is no company that can compete with free infrastructure for 10 years), own the EV charging network, stall investment by any other sources, and at the end of 10 years VW will own the next generation of transportation infrastructure.
- Appendix C is very thin on details. The Government in its response to comments has stated that it will not oversee the expenditure of the \$2 billion. Motion For Entry of Partial Consent Decree, Exhibit 5 at 16. Given this, it is our great concern that VW will be allowed to act in ways that will undermine and may completely destroy the existing EV charging market competition.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this 11th day of October, 2016, in San Francisco, California.

-4-

Vice President for Finance CHARGEPOINT INC.

MDL No. 2672

DECLARATION OF DAVID ADAMS

EXHIBIT 7

Case 3:15-md-02672-CRB Document 1973-6 Filed 09/30/16 Page 71 of 162



EVgo Services LLC 11390 West Olympic Blvd., Suite 250 Los Angeles, CA 90064 (310) 954-2900 www.evgo.com

August 5, 2016

VIA EMAIL ONLY: pubcomment-ees.enrd@usdoi.gov
Assistant Attorney General
U.S. Department of Justice – ENRD
P.O. Box 7611
Washington, D.C. 20044-7611

Proposed Partial Consent Decree Under the Clean Air Act RE: Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation, Case No: MDL No. 2672 CRB (JSC) D.J. Ref. No. 90-5-2-1-11386

Dear Assistant Attorney General:

Please find enclosed comments and recommendations from EVgo Services LLC ("EVgo") regarding <u>Appendix C</u> and <u>C-1</u> of the proposed Partial Consent Decree in the Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Litigation. As part of the Partial Consent Decree, Volkswagen has agreed to "Invest \$2.0 billion over 10 years in zero emissions vehicle (ZEV) infrastructure, access and awareness initiatives," including \$1.2 billion nationally and \$800 million in California. Our comments are limited to these sections of the Partial Consent Decree.

EVgo owns and operates the largest public high-speed charging network in metropolitan areas across the United States, with over 750 DC fast-charging stations. EVgo believes that providing a network of high-speed charging is the best way to increase range confidence and provide access to the benefits of electric vehicles to the most diverse set of consumers. As an owner operator, EVgo is committed to ensuring that drivers have reliable access to well-maintained and financially sustainable infrastructure. EVgo's offerings include partnerships with automakers to provide promotional programs for their drivers, monthly subscription plans offered directly to drivers, as well as credit-card/walk-up payment methods to serve all members of the public. In addition, EVgo aims to support all plug-in ZEVs in the marketplace regardless of connector type. In the context of the Partial Consent Decree, EVgo offers the following comments:

The growing electric vehicle charging services industry includes many companies with multiple
types of business models that have made significant investments in infrastructure (estimated at
more than \$500 million to date) to serve current and future drivers. It is important that the
settlement consider the competitive impacts on the existing service provider industry and
include competitive opportunities for private sector partners to provide services, equipment
and even ownership and operation of the infrastructure built in the program, as well as pricing
and program options to drivers.

Case 3:15-md-02672-CRB Document 1973-6 Filed 09/30/16 Page 72 of 162



EVgo Services LLC 11390 West Olympic Blvd., Suite 250 Los Angeles, CA 90064 (310) 954-2900 www.evgo.com

- 2. Infrastructure built in the program should facilitate the greatest amount of petroleum offset. By focusing on public fast-charging infrastructure at 100kW levels and above, compared to typical outlets at less than 10kW, the infrastructure will serve 12 times as many drivers per dollar invested and three times the kWh!. It will also begin to simulate the existing fueling infrastructure, which limits the cost of efforts toward behavior change for drivers and the futility of such behavior change. Utilities and building owners are already investing in lower-speed outlets and building codes now require them in many states across the country. Thus public high-speed charging would not duplicate existing investment, but would instead leverage the industry's development and increase access for residents of multi-unit dwellings across income levels, especially renters and those without dedicated on-site parking.
- 3. Infrastructure investments should be dedicated to electrical charging, not hydrogen refueling. The marketplace has made a clear decision that battery electric vehicles are the preferred technology. Dozens of automakers are already selling or have announced near term plans to build battery electric vehicles. Only one (Toyota) is actively marketing hydrogen. Providing hydrogen refueling would unfairly advantage that company. Furthermore, the production and delivery of hydrogen refueling stations is not inherently low pollution. Extensive conditions would need to be placed on the development of the infrastructure and ongoing enforcement of its fuel source would be required.
- 4. Educational/promotional spending should be highly limited, instead favoring durable investments for drivers and the broader public. Indeed, the pollution generated from driving the faulty vehicles is durable; so too should be the benefit from the decree. Further, it is very difficult to measure the impacts of promotional investments or to assure that they reach the appropriate audience with the appropriate message to benefit drivers. Leaving all these considerations to a review by oversight agencies over a ten year period simply asks too much for an engaged public and public sector. Durable infrastructure has clear and definable outcomes.
- 5. The demand charge component of operating costs and demand mitigation measures such as energy storage should be considered eligible expenditures. Currently, electricity costs are excluded (Section 2.2 of <u>Appendix C-1</u>); such restriction should be clarified to only apply to the variable charges for each kilowatt-hour delivered. A major portion of the operating costs for charging stations especially high-powered stations is the fixed "demand charge" that is included on the utility bill in most service areas. This demand charge makes it very expensive to operate charging equipment serving low volumes of electric vehicles, which will necessarily be the case for the next few years as production and EV adoption grow.
- 6. Reconsider/clarify the exclusion from "Creditable Costs" regarding joint efforts with other auto OEMs to create ZEV infrastructure (<u>Appendix C</u> paragraphs 1.4, 2.5.8 and 3.3.2.7). Certainly any expenditures should be incremental to and non-duplicative with other efforts, but it may be desirable to take advantage of economies of scale obtained from working with other partners on planning, coordination, and standardization. Where such efforts may reduce overall costs, there may be a benefit to permitting some allocation of such expenditures as Creditable Costs.

Case 3:15-md-02672-CRB Document 1973-6 Filed 09/30/16 Page 73 of 162



EVgo Services LLC 11390 West Olympic Blvd., Suite 250 Los Angeles, CA 90064 (310) 954-2900 www.evgo.com

A well-structured consent decree has the potential to be a durable legacy that future generations will point to as one of our generation's most thoughtful actions on the path to a sustainable future. We hope you are able to receive these comments in the spirit of producing the best outcome for our state, country and our world.

Sincerely,

EVgo Services LLC

Assumptions	Typical Level 2	High Speed Site w/ 4 Chargers	Notes
Capital cost	\$7,000	\$400,000	
Expected sessions per day	1	200	Assumes utilization @ 50% for high speed
sessions per week	7	1400	(25/day on 50kW & 75/day on 150kW)
kWh per session	15	15	Assumes L2 fully charges battery every day
Total kWh per day	15	3000	
per week	105	21000	
Required DC sessions per resident per week		2	
Conclusions		-	
Total drivers served per install	1	700	
Capital cost per driver served	\$7,000	\$571	Investments in high speed serve over 12 times the number of drivers
Weekly kWh per dollar of capital	0,015	0.0525	Investments in high speed provide 3 times the total kWh

* Actual size/configuration/cost of high speed charging sites will vary, but this represents a reasonable typical expectation. The proposed amendment would provide flexibility to address the specific needs of sites and communities.

EXHIBIT 8



EVgo Services LLC 11390 West Olympic Blvd., Suite 250 Los Angeles, CA 90064 (310) 954-2905 Email: terry.o'day@evgo.com

TRANSMITTED VIA EMAIL

December 5, 2016

The Honorable Fred Upton Chairman Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515

The Honorable Tim Murphy Chairman Committee on Energy and Commerce Subcommittee on Oversight and Investigations U.S. House of Representatives Washington, DC 20515 The Honorable Frank Pallone Ranking Member Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515

The Honorable Diana DcGette Ranking Member Committee on Energy and Commerce Subcommittee on Oversight and Investigations U.S. House of Representatives Washington, DC 20515

Dear Chairman Upton, Chairman Murphy, Ranking Member Pallone, and Ranking Member DeGette:

As leaders in the electric vehicle (EV) charging industry, we read with great interest your committee's notice of a hearing on the Volkswagen settlement agreement with the U.S. Environmental Protection Agency, U.S. Department of Justice, and California Air Resources Board. We believe that the settlement provides a unique opportunity for a large injection of capital into the electric vehicle charging sector and welcome it as the growing private sector participants strive to tackle a number of key infrastructure challenges that will require significant additional investment. Attracting additional dollars to transform public transportation is the key way to grow our industry and build on the opportunity presented by this investment.

Per our public comments on the settlement filed with the Department of Justice in August, EVgo believes that providing a network of high-speed charging is the best way to increase range confidence and provide access to the benefits of electric vehicles to the most diverse set of consumers. As an owner operator, EVgo is committed to ensuring that drivers have reliable access to well-maintained and financially sustainable infrastructure. EVgo is the nation's largest provider of public fast charging services for EVs with 850+ fast chargers across more than 50 metros in the U.S. Our stations are open to all vehicles, with charging connectors that support both dominant standards—CHAdeMO and CCS—and also allow Tesla drivers to connect and charge at EVgo stations with an adaptor. We own and operate our charging infrastructure and provide services directly to drivers, both in partnership with automakers and with individual drivers through subscription and walk up services. This unique business model puts EVgo squarely in the mix with consumers as direct customers, and retail properties

as host partners, and automakers as financial and strategic partners in delivering affordable, reliable, and accessible fast charging to EV drivers. When we say we put our customers first, we mean all of those stakeholders integral to the deployment of today's EVs as well as the next generation of vehicles.

In order to expand on our nation-leading fast charger footprint and the excellent work to date by the leaders in the charging industry, large sums of additional investment will be needed to cover increased operating expenses, upgrade 50kw stations to 100kw, 150kw, and eventually 300kw+ chargers that get EV drivers on their way in 10-20 minutes, and proliferate the number of public fast charge stations to make EVs accessible to residents of all geographies and income levels by addressing the multifamily housing challenge. The Volkswagen investment will be a significant down payment on the investment required to make ubiquitous EV deployments a reality. The EV charging industry is a strong and growing set of companies that stands ready and able to execute on the needs of settlement parties as Volkswagen looks to deploy settlement resources quickly, efficiently, and responsibly to overcome infrastructure barriers to EV adoption.

We appreciate the opportunity to share our views today and look forward to being a helpful partner as we move toward mass EV adoption across the country. Please feel free to contact us if we can be of assistance as the committee continues its work on this matter.

Sincerely,

Terry O'Day Vice President

EXHIBIT 9

Mitigation Trust Under the Partial Settlement Webinar for Prospective Beneficiaries to the with Volkswagen

November 18, 2016⁻

United States Environmental Protection Agency
Office of Enforcement and Compliance Assurance
Air Enforcement Division

*This version includes minor corrections to the version presented on the November 18 webinar.



Overview

- Today's presentation will
- Summarize the partial settlement
 - Highlight useful resources
- Outline the ZEV Investment Requirement
- Walk through the Mitigation Trust in detail
 - Answer questions
- Today's presentation is a summary, the legal documents are controlling

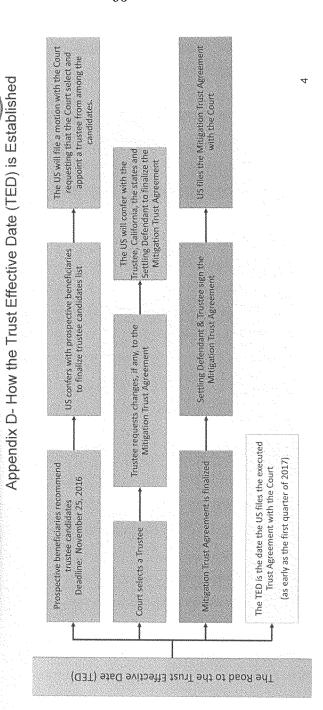
C

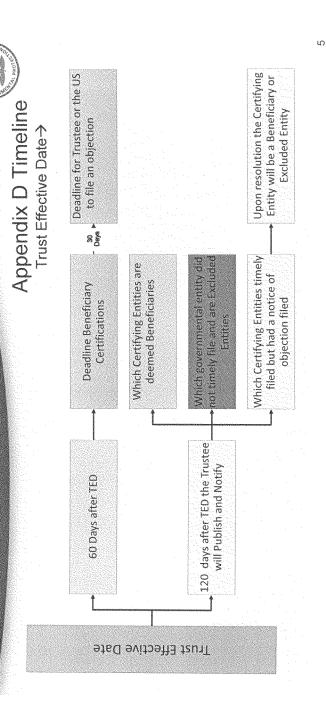


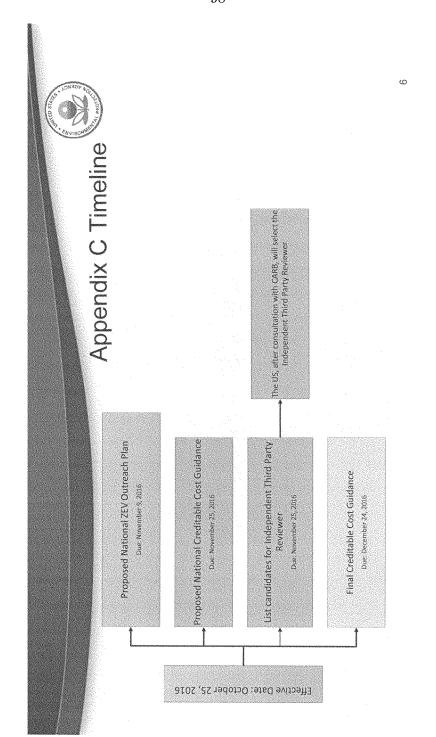
Overview of Partial Settlement

- On June 28, the United States lodged with the Court a
 settlement that partially resolves allegations that Volkswagen
 violated the Clean Air Act by the sale of approximately
 500,000 vehicles containing 2.0 liter diesel engines equipped
 with defeat devices
- CD Entered by the Court on October 25, 2016
- The settlement consists of three major components:
- 1. Buyback or emissions modification on at least 85 percent of the subject vehicles (Appendices A & B)
 - 2. 2.7 billion to fully remediate the excess NO_x emissions from the subject vehicles (Appendix D)
- 3. Invest \$2 billion to promote the use of zero emission vehicles and infrastructure (Appendix C)

ന









Additional Resources

- Web fact sheet: https://www.epa.gov/enforcement/volkswagen-clean-air-act-partial-settlement
 - Summary of the settlement
- Details for prospective Beneficiaries
- FAQ on Mitigation
- The settlement document: https://www.epa.gov/enforcement/201-partial-and-amended-consent-decree
 - The language of the settlement document controls
- Consumer site: VW outreach on ZEV: www.vwcourtsettlement.com

~



Appendix C: ZEV Investment

- VW must invest \$2 billion over 10 years
- \$1.2 billion National ZEV Investment (excludes CA)
- \$800 million California ZEV Investment
- VW investment plan must advance the use and market penetration of ZEVs, have a high likelihood of utilization, provide accessibility/availability where most needed, and build positive awareness of ZEVs
- VW/s investments must be additional investments beyond what it planned to invest before the settlement & what is required by law
- For the National ZEV investment, VW is required to develop a National Outreach Plan to solicit input from states, local governments, tribes, & federal agencies

 ∞



ZEV Investment Commitment

- VW controls how it spends money to satisfy the investment requirement subject to the CD requirements and restrictions
- There are no named Beneficiaries
- Goal: Facilitate increased use of ZEVs
- \$2 billion
- Appendix C

Mitigation Trust

- Beneficiaries control how Trust money is spent
- Goal: mitigate NOx emissions
 - \$2.7 billion
- Appendix D

ZEV Investment ≠ Mitigation Trust

O



Eligible Investment Examples

- For the \$1.2 billion National ZEV Investment
 - ZEV infrastructure
- Level 2 charging at multi-unit dwellings, workplaces, and public sites
 DC fast charging facilities accessible to all vehicles utilizing non-proprietary connectors
 - · Later generations of charging infrastructure
 - Hydrogen or other ZEV fueling stations
 - ZEV Éducation
- · Brand-neutral education or public outreach
- Goal is to increase public awareness of ZEVs
 - ZEV Access
- Programs to increase public exposure and/or access to ZEVs without requiring
 the consumer to purchase or lease a ZEV at full market value
 Carshare and ride halling services, ride and drives
- \$800 million CA Investment additionally allows investments in:
- Heavy-duty fueling infrastructure
- Scrap and replace with ZEV vehicles
 - "Green City" initiative

10



Process for VW National ZEV Investment

- \$1.2 billion invested over four 30-month cycles, \$300 million each cycle
- For each cycle, VW to submit a draft National ZEV Investment Plan:
- Description of proposed ZEV Investments, timelines, anticipated creditable costs
 Explanation of how each investment advances the use and market penetration of ZEVs, has high likelihood of utilization, provides accessibility/availability where most needed, and builds positive awareness
 - The EPA and VW meet and confer about draft plan
- Then, VW will submit a final plan, and EPA will approve or deny the final plan
- Upon approval, VW implements the investment plan, with annual reporting on progress

Timeline for first 30-month VW National ZEV investment Plan

Consent Decree Effective Date

National ZEV
Outreach Plan

National ZEV Investment Play *Draft due February 22, 2017 or 30 days after close of comments under outreach plan



Opportunities for Stakeholder Input

- W must solicit and consider input from states, municipalities, Tribes, and federal agencies
 - VW must provide reasonable notice for opportunities to provide input on: www.vwcoursettlement.com/en/
- Ultimately, VW has discretion to incorporate the input into its plan
- Each of VW's plans must be comprehensive and specify how investments will be made
 - Locations, schedule, maintenance
- Studies and reports to support that the investments will support increased ZEV use
 - Approved plans will be made publicly available





- Creditable cost guidelines will identify what expenditures can be counted as satisfying the \$1.2 billion National ZEV Investment requirement
- VW will propose the guidelines and EPA will approve or deny based on the terms of the CD
- An independent third party accountant will audit VW's expenditures to verify if they can count toward VW investment commitment
- The accountant will use the creditable cost guideline to conduct its review and audit
- EPA will consider the accountant's determination
- · California's ZEV Investment Plan will be created and managed similarly





ZEV Investment Accountability

- Economic incentives
- It is in VW's business interest to support increased ZEV use
- Substantial stipulated penalties if VW does not comply with Appendix C
- VW must solicit input from states, Tribes and federal agencies
- Oversight
- EPA must review and approve VW's plan
- VW has to meet and confer with EPA to discuss the direction it is proposing
 - Independent auditor of VW's expenditures
- EPA approves or denies VW's claims for creditable costs
- Transparency
- The plan must be made publicly available
- Detailed reports must be made publicly available



Appendix D: Mitigation Trust Fund

- Volkswagen will fund a \$2.7 billion mitigation trust fund which is intended to fully mitigate the excess NO_x emissions from the 2.0 liter vehicles
- 50 states, DC, Puerto Rico, and federally recognized Tribes can become beneficiaries
- Each beneficiary will receive an allocation of funds that can be used for any of the listed eligible mitigation actions
- The allocation is primarily based on the number of Volkswagen 2.0 Liter Subject Vehicles registered within the jurisdictions of the beneficiaries



Mechanics of the Mitigation Trust

- VW establishes and funds the mitigation trust
- An independent Trustee administers the trust according to the specific language of the trust document (Appendix D of the CD)
 - The United States has no control over the trust funds
- Every state, the District of Columbia, Puerto Rico and federally recognized Tribes may become Beneficiaries of the trust if they follow the mandatory procedures.
- Beneficiaries of the trust receive allocations from the trust to fund specified and pre-approved mitigation
- Potential Beneficiaries must take action to become a Beneficiary (details on slide 20)



Selection of Trustee

- The procedures to select the Trustee are outlined in ¶ 15 of the Consent Decree
- Prospective Beneficiaries may submit to the United States a list of between 3-5 recommended trustee candidates (one list from Tribes, one list from the states, one list from California)
- The US confers with Prospective Beneficiaries to agree on one list of between 3-5 trustee candidates, and files a motion requesting the Court to select a trustee from among the candidates
- The US files a motion requesting that the Court to select and appoint a trustee from among the candidates
 - If the Court does not select a Trustee, the process is repeated
- If the selection process goes smoothly, then the Trustee will be selected as soon as the first quarter of 2017



Trust Effective Date

- The Trust Effective Date (TED) is the date the United States files with the Court a finalized Trust Agreement that has been signed by Volkswagen and the Trustee
- The TED is important because the deadlines in the Mitigation Trust flow from the TED

to submit the paperwork to become Beneficiaries TED+60 → **DEADLINE for Potential Beneficiaries**

∞



Timing of the Mitigation Trust

- October 25: Consent Decree finalized
- May take months to choose Trustee, set up Trust
- "Trust Effective Date" when the Trustee is formally put in place
- TED + 60 = Deadline for States to certify as Beneficiaries
- States have 90 days after becoming Beneficiary to write Mitigation Plans
- Beneficiaries may have access to funds by mid-2017



How To Become a Beneficiary

- Every State, the District of Columbia, Puerto Rico, and Tribes may become a Beneficiary BUT they must take action in order to do so
- A potential beneficiary must file a certification form (attached as Appendix D-3 to the CD) with the Court in order to become a Beneficiary
- In the certification form each potential beneficiary must:
- a) Designate one agency or office to act for the Beneficiary
- b) Submit to jurisdiction of the federal court in California overseeing this settlement and consent to the terms of the frust
- Commit to certain practices for handling funds

O

- d) Waive any claim for injunctive relief against VW for environmental matters concerning the 2.0L Subject Vehicles
- Certify it will not deny DMV registration to any 2.0L Subject Vehicle solely on the basis that the vehicle has the defeat e) Certify that the Beneficiary will make all documentation of its expenditures under the Trust publicly available
-)) Make other certifications to ensure public accountability and proper administration of the Trust

devices or received the Emissions Modification



Beneficiary Mitigation Plan

- After signing the certification each Beneficiary must submit to the Trustee and make publicly available a Beneficiary Mitigation Plan before receiving any Trust funds
- This plan must:
- a) Explain the Beneficiary's overall goal for the use of the Trust funds
- b) Describe the NOx reductions the Beneficiary expects its plan to achieve
- c) List the categories of Projects the Beneficiary intends to implement
- Explain how the Beneficiary will consider benefits to air quality in communities with a disproportionate air pollution burden and explain how it will seek and consider public input; and T
- Make other statements to allow the public and the Trustee to better understand the goals of the plan ©



The Allocation of Trust Funds

- primarily based on the number of Volkswagen 2.0 Liter Subject Vehicles registered To ensure equitable distribution, funds are allocated proportionally to Beneficiaries within the jurisdictions of the Beneficiaries
- Appendix D-1 lists the specific amount and allocated percentage each Beneficiary may receive
- Allocation amounts range between \$7.5 million and \$381 million
- Allocation amounts may increase proportionally if VW is required to pay more into the Trust



Distribution of Trust Funds

- The Trustee NOT THE EPA decides whether:
- Projects for which a Beneficiary requests funding are allowable under the well-defined list; and <u>a</u> Q
 - The costs of the project are allowable under well-defined cost guidance
- Allowed expenditure of Trust funds
- · Beneficiaries may only use their allocation of Trust funds for projects listed on the following slide
 - Must follow cost-sharing guidelines
- Projects otherwise required by state or federal law are not eligible for Trust funds
- Beneficiaries may use Trust funds for administrative costs, but administrative costs cannot exceed 15% of allocation amount



Eligible Mitigation Projects

- Class 8 local freight trucks and port drayage trucks
 - Class 4-8 school/shuttle/transit buses ci
- Freight switcher locomotives
- Ocean going vessels shorepower Ferries/tugboats
 - Class 4-7 local trucks
- Airport ground support equipment Forklifts and cargo handling equipment at ports 34500100
 - Light duty ZEV supply equipment (up to 15% of allocation) တ

DERA Option (#10)

- Option to use Trust Funds for actions not specifically listed but otherwise eligible under DERA
- Trust Funds cannot be used to Beneficiaries may use Trust Funds for their DERA nonfederal voluntary match meet DERA non-federal
- State and tribal DERA grants requirements only

mandatory cost share



DERA Option - States

- Trust funds can be used to match the EPA base funding for State DERA grants
 - Example A:
- State's DERA allocation in FY2017 is ~\$200,000
- State uses \$200,000 in Trust funds as the 1:1 voluntary non-Federal match State bonus is 50% of the base amount \$100,000
- Total State funding is \$500,000
- State will receive \$300,000 from DERA and \$200,000 from the Trust
 - Trust funds can be greater than the 1.1 voluntary match above
 - Example B:
- State's DERA allocation in FY2017 is ~\$200,000
- State may use a larger amount \$1,000,000 in this example in Trust funds
 - State bonus DERA amount of \$100,000
- State's DERA Clean Diesel Grant program and Trust funding for FY2017 would be \$1.3 million
 - \$300,000 from DERA and \$1,000,000 from the Trust.
- Note: Timing of DERA State FY2017 grants will not match up with availability of trust funds
 - Grantees can add voluntary funds (trust funds) later to FY2017 grants or wait until FY2018 grants



DERA Option - Tribes

- Federally-recognized Tribes can become Beneficiaries
- Tribes can implement Eligible Mitigation Actions 1-9 directly with the Trustee or utilize the "DERA Option"
- DERA Option: Trust funds can be used as a voluntary match for grants for the DERA Tribal RFP
- Trust funds cannot be used for mandatory cost-shares
- Tribes submit a Notice of Intent to Participate in DERA by Sept 1 each year These notices "reserve" funds for the Tribe
- Tribes apply to DERA Tribal RFP incorporating these "reserved" funds
 - Winning applications are awarded as DERA tribal grants
- Funds reserved for non-winning applications revert to the Tribal allocation
- DOJ is responding to Tribal Consultation



Timeline for DERA Option Implementation

Fall 2016	Prepare guidance/info for states and tribes Outreach to potential beneficiaries
Winter 2017	State DERA grant program launches* Possible Trust Effective Date**
Spring 2017 and beyond	States certify as Beneficiaries States submit Beneficiary Mitigation Plan Adjust DERA Tribal RFP timing as needed Assist states and tribes using DERA option

*Dependent upon DERA Reauthorization and/or 2017 Appropriation **Trust Effective Date may be later, pushing timeline back





- cleandiesel@epa.gov
 - 1-877-623-2322
- www.epa.gov/cleandiesel
- VW DERA Option web page
 - Fact sheet
- · State and Tribal program guidance





- Environmental Justice communities will benefit from the Mitigation Trust because:
- Beneficiaries are required to consider Environmental Justice communities in planning
- The no cost-share requirement for government-owned equipment will allow governments to direct the Trust Funded projects to low-income communities





- Responses now as we are asked
- Supplementary FAQs based on the questions received today
 - vw_settlement@epa.gov

FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115 Majority (202) 229-2927 Misority (202) 225-3641

December 21, 2016

The Honorable Gina McCarthy Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Dear Administrator McCarthy:

Thank you for having your designees appear before the Subcommittee on Oversight and Investigations on Tuesday, December 6, 2016, to testify at the hearing entitled "Volkswagen's Emissions Cheating Settlement: Questions Concerning ZEV Program Implementation."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Wednesday, January 4, 2017. Your responses should be mailed to Elena Brennan, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515, and e-mailed in Word format to Elena.Brennan@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Tim Murphy

Subcommittee on Oversight and Investigations

cc: The Honorable Diana DeGette, Ranking Member, Subcommittee on Oversight and Investigations

Attachment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JAN 1 8 2017

OFFICE OF CONGRESSIONAL AND INTERGOVERNMENTAL

The Honorable Tim Murphy Chairman Committee on Energy and Commerce Subcommittee on Oversight and Investigations U.S. House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Enclosed please find the U.S. Environmental Protection Agency's responses to the Subcommittee's questions for the record following the December 6, 2016, hearing titled "Volkswagen's Emissions Cheating Settlement: Questions Concerning ZEV Implementation."

I hope this information is helpful to you and the members of the Subcommittee. If you have further questions, please contact me or your staff may contact Carolyn Levine in my office at levine.carolyn@epa.gov or (202) 564-1859.

Sincerely,

Nichole Distefano Associate Administrator

Enclosure

U.S. Environmental Protection Agency
Responses to Questions for the Record
Hearing: "Volkswagen's Emissions Cheating Settlement: Questions Concerning ZEV Program
Implementation"

Subcommittee on Oversight and Investigations Committee on Energy and Commerce U.S. House of Representatives December 6, 2016

The Honorable Tim Murphy

Please provide a list and description of all prior EPA settlements or enforcement actions that
permit the party responsible for a violation to establish a new business or generate revenue as
part of the settlement or enforcement action.

Response: Many of EPA's settlements require remedies for the harms caused by the violations, and do not specify how the defendant will accomplish the work required. A defendant can set up a separate entity to accomplish the work; that is generally not specified in the settlement agreement.

The list of EPA settlements that require injunctive relief is many thousands of cases long. Information about cases resolved by the EPA since 1998 is available on EPA's website: https://cfpub.epa.gov/enforcement/cases/index.cfm?templatePage=3.

The ZEV investment requirement is a remedy specifically tailored to the harm caused by Volkswagen. Because there has not previously been a case involving exactly this kind of harm, the EPA has not had a remedy of exactly this type before. See Response to Question 10, below, for a description of the harm at issue in this case.

Volkswagen remains subject to all federal and state laws, including laws regarding competitive behavior. The first partial consent decree ("Decree" or "Settlement") in no way enables Volkswagen to participate in the ZEV market in a way it, or any other company, could not have done outside an enforcement case. With that said, the ZEV investment requirement will be a business investment made by Volkswagen. Nothing in the Settlement prevents Volkswagen from obtaining revenue from ZEV-related investments. Volkswagen could have decided to make these investments even without this enforcement case.

Injunctive relief is about remedying the harm, not penalizing the violator. The first partial consent decree does not address penalties. Penalties are payments to the United States Treasury. Note that since the December 6 hearing, the United States lodged a second partial consent decree to address the remaining vehicles not addressed by the first partial consent decree. The United States also lodged a third partial consent decree to impose a civil penalty and to secure measures to prevent future violations. A complete description of these settlements is available at: https://www.epa.gov/enforcement/volkswagen-clean-air-act-civil-settlement.

- 2. What role will EPA play to ensure existing and future infrastructure markets remain competitive?
 - a. How does EPA intend to evaluate how projects approved under the National ZEV Investment Plan will affect the existing electric vehicle infrastructure marketplace, including but not limited to any negative effects on existing electric vehicle infrastructure manufacturers or service providers?
 - i. If so, what criteria will EPA use to conduct these evaluations?
 - ii. If not, please explain why not.

Response: The Decree includes controls on the work that Volkswagen will undertake as part of the ZEV investments. Volkswagen is required to solicit and consider input; the company must adhere to specified and detailed creditable cost guidance in order to have its expenditures credited toward the settlement amount; the charging infrastructure must be accessible to all vehicles utilizing non-proprietary connectors; and plans must be developed for each of four 30-month investment cycles. In addition, there are strong accountability provisions including an obligation to comply with all laws, the same as any other company must do. If Volkswagen engages in any anti-competitive behavior, it can be held to account in the same way any other company could. Volkswagen cannot do anything under the Decree that it could not have done without EPA's enforcement action. There are also public transparency requirements that will provide the public, and participants in the market, considerable information on Volkswagen's activities, and allow them to comment and make suggestions on Volkswagen's plans, so Volkswagen's competitors will have a much bigger window into Volkswagen's operations than is true of any other company.

The EPA does not make the investment decisions; EPA's role is to ensure that Volkswagen follows all of the requirements of the Decree. The EPA will not be evaluating, nor would it be appropriate to evaluate, the impact of Volkswagen's investments on individual companies. The provisions of the Decree that are summarized above are intended to ensure an accountable process for Volkswagen's investment decisions and implementation.

- 3. Under the terms of Appendix C, Volkswagen ("VW") is permitted to obtain revenue from the ZEV Investments. If VW decides to create and manage a network through these ZEV investments, they could potentially obtain rich data on consumer and market trends.
 - a. While the terms of the consent decree prevent VW from installing infrastructure or distributing promotional materials that feature or advantage their brands, if VW, or a subsidiary, collects data from the ZEV Infrastructure installed under the terms of the partial consent decree, can they use that information to inform or execute marketing and sales strategies for VW brand vehicles, including the many electric vehicle models the company intends to introduce in coming years?

Response: The Settlement does not allow Volkswagen to do anything that it could not do as a business decision as a private company. However, it does obligate Volkswagen to account publicly for its investments, a requirement that does not apply to other companies in this sector. See also EPA's response to questions 1 and 2 above.

- 4. The Partial Consent decree requires VW to include in its Annual National ZEV Investment Reports data about the utilization rates of new ZEV infrastructure, "including the percentage of time that each connector is attached to a vehicle, energy dispensed per charger per day, and any other metrics that indicate the maximum, minimum, and average utilization of a charging station, including trends in usage over time."
 - a. Does the Partial Consent Decree put any limitation on other types of data that VW can collect about the new ZEV infrastructure, such as customer information?
 - b. Does the Partial Consent Decree require VW to publish annually any other types of data gathered from customers or ZEV infrastructure other than utilization rate information?
 - c. Does the Partial Consent Decree require VW to publish any data collected from ZEV infrastructure including but not limited to utilization rate information –prior to the release of each year's Annual National ZEV Investment Report? If not, can VW monetize this information in the period of time in which it is not publically available?

Response: The information that Volkswagen is required to include in its annual reports is listed in Appendix C of the Decree. That includes the information mentioned in your question, as well as other information on costs. The Decree does not limit the other activities in which Volkswagen can engage, except that Volkswagen is required to comply with all applicable laws in conducting these investments. Volkswagen cannot do anything that other companies engaging in the same business activity cannot legally do. One key difference is that while other companies are not required to publish data of the type that Volkswagen will have to publish, Volkswagen will be required to make that information available to the public annually.

- In EPA's November 18, 2016 response to the Committee, Ms. Giles noted that the Office of Transportation and Air Quality ("OTAQ") would be working closely with the Office of Enforcement and Compliance ("OECA") in overseeing implementation of the partial consent decree.
 - a. What specific role or resources will OTAQ provide to assist with oversight of Appendix C?
 - b. Will any other federal offices or agencies other than the Department of Justice have a role monitoring or guiding the implementation of Appendix C?

Response: OECA will be overseeing implementation of the Decree, as it does for all EPA enforcement resolutions. If OECA has questions about the program that would assist it in monitoring compliance, it will raise those questions with the program experts in OTAQ, again as it does for all consent decree implementation. For example, OTAQ support will be essential in assessing Volkswagen's proposed emissions modifications pursuant to Appendix B of the Decree.

Other federal agencies are specifically mentioned as entities from whom Volkswagen must solicit input on the investment plans. Volkswagen is required to consider input from those agencies and will likely find federal agencies' analyses of ZEV infrastructure needs and suggested corridors useful in making investment decisions. If in the course of overseeing compliance OECA has specific questions on which other agencies have expertise, OECA will solicit input from other agencies as needed, as we do with all enforcement cases. Other agencies will not have a role in monitoring or

guiding the implementation of Appendix C, except as provided in the provisions requiring Volkswagen to solicit input from other federal agencies.

6. In EPA's response to the Committee's November 1, 2016 letter on the ZEV Investment, Ms. Giles highlighted the stakeholder outreach VW is required to conduct under the terms of the Partial Consent Decree as a means for ensuring transparency and accountability in VW's investment decisions. The response stated "EPA intends to ensure Volkswagen conduct a robust process for public input and accept comment from relevant stakeholders before any decisions are made."

However, under the terms of the Partial Consent Decree, VW is only required to seek input from "States, municipal governments, federally-recognized Indian Tribes and federal agencies," and is under no obligation to act upon the suggestions it receives in the course of this outreach.

At the hearing, Ms. Giles reiterated EPA's expectation that VW would solicit input from all interested stakeholders. She added that in addition to soliciting comment, VW has to consider the input and describe how they considered the input in their plan.

- a. If VW is not required to act on comments received from stakeholders, how does this stakeholder outreach process provide accountability?
- b. Even if VW follows or goes beyond the requirements of the partial consent decree, solicits comments from all stakeholders, considers those comments and documents their consideration, they are under no obligation to act on the comments.
 - i. How does EPA intend to evaluate VW's consideration of the input they receive from stakeholders?
 - ii. How does EPA intend to respond if VW documents their consideration of the comments from stakeholders but does not act on those comments?

Response: Volkswagen has already commenced outreach for the development of its first investment plan, and that outreach invites comments from all entities, not just the ones listed in the Decree. Conducting the required outreach is an obligation of the Decree that the EPA intends to ensure is

The Decree also requires Volkswagen to consider the input, and to explain how they considered that input in their plan. The Decree does not require Volkswagen to change investment plans based on comments received; it requires only that Volkswagen consider them and explain in a public document how they considered them. The EPA expects that the comments will provide useful input, and also that a diversity of comments will be submitted, many of which do not agree with each other. Volkswagen has the obligation to make the investment decisions, but also to consider the comments in reaching its decisions. Ensuring adherence to this requirement is part of the oversight of the Decree that the EPA will be doing. This public transparency is the foundation of accountability. As with all enforcement oversight of settlements, in determining compliance, the EPA evaluates the actions of the defendant against the terms of the consent decree. The Decree is clear that the investment decisions ultimately are made by Volkswagen.

- 7. In October, Christopher Grundler of the Office of Transportation and Air Quality stated that EPA "would be glad to meet and confer with interested parties and get their input as we review the plan." Does EPA plan to meet and confer with parties other than Volkswagen to receive input on its National ZEV Investment plan?
 - a. [If yes]: How would that work? Does EPA plan to provide copies of Volkswagen's draft National ZEV Investment plan to interested parties? And how would EPA even provide input received this way to Volkswagen, given the "limited" role of EPA described in the written testimony?
 - [If no]: Please explain Mr. Grundler's comments that EPA will meet and confer with interested parties to receive their input.
 - b. Does EPA plan to reach out to interested parties to obtain input on the ZEV Investment Commitment in any other ways?
 - i. If so, what is the process for this?

Response: Mr. Grundler's comment that the EPA would meet and confer with other parties was made before he fully reviewed the Decree. The Decree as entered is clear that the EPA does not have a role in the investment decisions beyond ensuring that Volkswagen meets the requirements listed in the Decree. The EPA will not be conducting meetings with outside parties about the implementation of this Settlement.

- 8. One of the stakeholders that VW is required to include in their national outreach plan is federal agencies.
 - a. What federal agencies does EPA expect to be incorporated into VW's outreach and why?
 - b. Under the terms of the partial consent decree, can VW invest in projects at federal agencies or locations? For example, if an agency wants to install charging infrastructure at a specific federal workplace or facility, can VW provide that infrastructure?
 - i. If so, how is this managed under federal contracting requirements?
 - c. Can VW invest in projects that support or benefit federal programs and initiatives? For example, can VW invest in projects the support the recently announced Highway Corridors, as requested by Congress under the FAST Act?

Response: The EPA expects that Volkswagen will solicit input from other federal agencies that have potentially relevant expertise, such as the Department of Transportation and the Department of Energy. If Volkswagen wishes to install infrastructure at a federal location, all federal contracting requirements would apply.

The Decree requires Volkswagen to solicit input from other federal agencies, and the EPA expects that such input would include the rationale and ideas described by the Department of Transportation in the designation of alternative fuel corridors under the FAST Act. The EPA anticipates that Volkswagen would consider such thoughtful efforts as very relevant and useful in developing its investment plan. Ultimately the investment decisions are made by Volkswagen, subject to the

constraints contained in the Decree. Volkswagen can receive credit only for investments and for costs that meet the Decree's criteria. The federal government does not direct Volkswagen's investments

- On December 2, 2016, the California Air Resources Board ("CARB") held a public input workshop regarding implementation of California's allocation of the ZEV Investment Commitment.
 - a. Does EPA intend to conduct similar public outreach?
 - i. If so, when will this occur and how will it be done?
 - ii. If not, why not?

In conjunction with that workshop, CARB released the state's "Guiding Principles" for the VW ZEV Investments. These included areas such as ensuring that investments are "complimentary and additional" to those already being made, prioritizing public ZEV infrastructure and public awareness to complement the state's ZEV Action Plan, the inclusion of investments in hydrogen fueling, and that investments do not "interfere with or undermine established and emerging businesses in the market place"

- b. Does EPA intend to develop and publicize similar guiding principles for the National ZEV Investment?
 - i. If so, who is responsible for developing this guidance and when will it be released?
 - If not, why not? Please explain why EPA's process differs from that utilized by CARB.

Response: The EPA does not intend to hold public input workshops. Volkswagen and others can certainly learn from the information presented in the California workshops, as well as information presented to Volkswagen through its public website. Under the Decree CARB is free to conduct its role as the state sees fit, and what is done in California does not have to be done elsewhere. Volkswagen certainly will learn from its experiences in California, and that learning may well inform investment decisions made by Volkswagen in other places, but the Decree is clear that the investment decisions are solely Volkswagen's to make. The requirements that govern Volkswagen's investments are already laid out in detail in the Decree. The EPA will not be providing any guidance; the Decree contains the terms that the EPA will enforce through its oversight.

10. In EPA's November 18, 2016 response to the Committee, Ms. Giles stated that the ZEV Investment is "intended to address the adverse effects of VW's violations on air quality by supporting technologies that are actually clean." In the same letter Ms. Giles also stated that the partial settlement would "offset the broader harm to the clean vehicle market through investments in ZEV infrastructure, access and education."

Further, at the hearing, Ms. Giles explained that the NOX Mitigation Trust and ZEV Investment Commitment are "designed to address separate harms." She stated, "the mitigation portion is to make up for pollution caused, and the ZEV portion is to address the fact that they sold dirty vehicles claiming they were clean." She later testified that the third part of the settlement agreement – the part not involving vehicles on the road or NOx emissions – "is to remedy the damage caused to the marketplace." Finally, in her written testimony Ms. Giles noted that "the ZEV investment requirement is a court-ordered remedy intended to address the specific harm VW caused to public health" by requiring investments in clean transportation.

- a. What is the purpose of the ZEV Investment Commitment? Is it intended to address air quality, harm to the clean vehicle market, or public health?
- b. If, as Ms. Giles indicated at the hearing, the ZEV Investment is intended to address harm to the clean vehicle market, please explain how harm to the market is tied to the Clean Air Act
- c. Ms. Giles also noted that consumers purchased these vehicles on the premise that they were clean. This implies that the ZEV investment remedy is connected to consumer deception.
 - i. Is the ZEV investment intended to address consumer deception?
 - [If yes]: Please clarify how a remedy for consumer deception is tied to the Clean Air Act and not the relevant FTC anti-deceptive marketing practices violations.
 - ii. What are the attributes for "clean vehicles" EPA used in its assessment of the impact of VW's violations?
 - iii. Aside from excess NOx emissions, what are the attributes of the VW vehicles that caused EPA to state the vehicles sold were "dirty" vehicles?

Response: The purpose of the ZEV investment requirement is to remedy the adverse impacts from Volkswagen's Clean Air Act violations and further the purposes of the Clean Air Act by requiring support of truly green vehicles. Consumers purchased these vehicles in part on the basis that they were advertised as "clean" and "green." Those consumers, properly informed, would likely have instead purchased a vehicle that was actually clean, and that includes ZEVs. This settlement attempts to remedy the harm caused by Volkswagen's violations of the Clean Air Act, and address the fact that the population of vehicles on the road today, and related infrastructure, are likely different from what it would have been had Volkswagen not violated. The Court found that the ZEV provisions furthered the purpose of the Clean Air Act, and were fair, reasonable and in conformance with applicable laws.

¹ Volkswagen's Emissions Cheating Settlement: Questions Concerning ZEV Program Implementation: Hearing before Subcomm. on Oversight & Investigations, H. Comm. on Energy & Commerce 114th Cong. 14 (2016) (unofficial transcript on file with Committee).
² Id.

The ZEV provisions are not about consumer deception; there are separate consumer remedies that are part of a separate settlement that address that issue. EPA's settlement is about clean air, and the ZEV and mitigation provisions address the harm to clean air and clean vehicle markets that Volkswagen caused by marketing its dirty vehicles as clean.

- 11. The purpose of the ZEV Investment Commitment is stated broadly in the preamble to Appendix C as "direct[ing] \$2 billion of investments over a period of up to 10 years into actions that will support increased use of zero emission vehicle ("ZEV") technology in the United States."
 - a. Please describe what EPA believes are the goals for developing infrastructure for the electric vehicle industry in the United States.
 - b. Please describe the current state of investment in ZEV infrastructure and why those investments are expected to be insufficient over the next ten years.
 - c. Please describe the amount of additional infrastructure expected to be developed through the implementation of the proposed ZEV Investment Commitment.

Response: The purpose of Appendix C is to support the market for zero emissions vehicles in the United States, leading to cleaner air. Many entities that have publicly stated views on the ZEV portion of the settlement acknowledged that the lack of ZEV infrastructure is one of the significant barriers to greater adoption of zero emission vehicles. The amount of infrastructure expected to be developed under the Decree is the amount that can be accomplished by the portion of the \$2 billion that is allocated to ZEV infrastructure development by the Decree. The Decree creates an expenditure obligation, bounded by strict limits on what investments qualify.

- 12. In April 2015, the National Academies released a report titled "Overcoming Barriers to Deployment of Plug-in Electric Vehicles." Notably, this report recommended against any additional direct federal investment in new public charging infrastructure and highlighted the need for more research on the relationship between charging infrastructure availability and consumer adoption of EVs. The report did, however, note vehicle cost as a significant impediment to adoption, and highlighted specific factors –such as battery size and performance as critical to addressing this challenge.
 - a. Is EPA aware of this report by the National Academies?
 - b. Does EPA agree with the finding in the report that, prior to committing significant resources to public charging infrastructure, it is important to answer questions such as what type of infrastructure is needed and where?
 - c. Recognizing that the ZEV Investment commitment is not a direct federal investment, one of its stated purposes is to advance the use of ZEVs. Does EPA believe that a large investment in EV infrastructure will have a greater benefit to adoption of ZEV vehicles than, for example, if the settlement required VW to fund non-proprietary research into more efficient and effective batteries?

Response: The Decree does not include any federal investment in ZEV infrastructure. One hundred percent of the investment will be undertaken by a private party. The ZEV infrastructure investment

is not intended to nor could it conceivably address every barrier to ZEV adoption in the United States. It is intended to require investment in ZEV infrastructure.

Another significant barrier to ZEV adoption highlighted by the National Academies report is lack of consumer awareness and knowledge about plug-in electric vehicles. The Decree requires Volkswagen to make significant investments in public education and outreach, which will help address this barrier.

The National Academies report is one of the authoritative reviews considering what the barriers are to increased adoption of ZEVs in the United States. While under the Decree Volkswagen makes the investment decisions, the Decree also requires Volkswagen to explain its investment decisions, and how it expects those investments to further adoption of ZEVs, specifically noting that Volkswagen should consider relevant research and studies. In addition, the plan is required to be updated every 30 months, allowing it to be changed to reflect both the changing market and new information about what types of infrastructure most support greater adoption of ZEVs.

- 13. Section 1.10.1 of the ZEV Investment Commitment defines an "infrastructure" investment as one "addressing an existing need or supporting a reasonably anticipated need."
 - a. Please explain the criteria EPA will use to determine whether there is an "existing need" or a "reasonably anticipated need" for proposed infrastructure investments.

Response: Volkswagen is required to explain what the current needs and reasonably anticipated needs are as part of its submission.

14. The Fixing America's Surface Transportation (FAST) Act, enacted in December 2015, required the Secretary of Transportation to designate "alternate fuel" corridors. The Department of Transportation did that last month, announcing 55 routes spanning 35 states. How will EPA consider the directives of the FAST Act and the "alternative fuel" corridors when overseeing the ZEV Investment Commitment?

Response: Volkswagen is required to consider input from other federal agencies in developing its plan, and the EPA would expect that the initial alternative fuel corridor designations and other work under the FAST Act would be particularly relevant to Volkswagen's investment choices. As the Decree explicitly states however, the investment decisions are Volkswagen's to make.

15. The Committee seeks further clarity on how EPA calculates the cost of mitigation projects in settlements, given discrepancies between the VW settlement and another settlement involving defeat devices.

In 1998, EPA reached a \$1 billion settlement with seven manufacturers for the sale of 1.3 million heavy duty diesel engines that contained a defeat device. In addition to a civil penalty, the settlement included \$850 million to replace or repair the affected engines and more than \$100 million for projects to reduce NOx emissions, including R&D on new technologies and fuels. At the time, EPA announced that the 1.3 million engines "emitted more than 1.3 million tons of excess NOx in 1998 alone[.]" That amounted to six percent of annual NOx emissions from all cars, trucks and industrial sources, "equivalent to the NOx emissions from an additional 65 million cars being on the road." EPA added that the settlement would "prevent 75 million tons

of [NOx] air pollution over the next 27 years...more than the total U.S. NOx emissions for three years."

In response to Questions for Record from the Committee's October 2015 hearing on VW, EPA noted that "[t]he vast majority of NOx from on-road vehicles comes from heavy-duty trucks and gasoline vehicles" and that "NOx emissions from light-duty diesel cars and trucks contribute less than 0.1 percent of NOx pollution from on-road vehicles."

The VW settlement involves a fraction of the light-duty diesel fleet – already a small portion of U.S. NOx emissions – and yet the Mitigation Trust, alone, almost triples the entire 1998 heavy duty diesel settlement, which involved more than double the number of affected engines.

- a. When investigating emissions violations, how does EPA evaluate and quantify the environmental harm that requires mitigation?
- b. Is this consistent across all sources? If not, why not?
- c. Are we to assume that less than 500,000 VW light-duty diesels emitted more NOx than 1.3 million heavy duty diesel engines?
 - i. If not, how do you explain the differences in these settlements?

Response: Every settlement is based on the facts and the law of each particular case, as well as the solutions acceptable to the parties in a negotiated settlement. There is not one formula that determines appropriate injunctive relief, including mitigation; each case is based on the facts and the applicable law.

The eligible projects under the mitigation trust have a range of cost effectiveness. Each state that elects to become a beneficiary will decide how to implement the mitigation trust in its state and what combination of projects best serve the people of the state. For example, replacing higher polluting diesel school buses may cost more than some other options for reducing NOx, but states may nevertheless opt to spend money on that option because it has the additional benefit of protecting those most vulnerable to ozone pollution—children and the elderly. In addition, determining the appropriate mitigation in an enforcement case involves many factors, of which the amount of illegal pollution is just one. What opportunities exist to reduce pollution, the cost of reducing that pollution in different locations, the differing situation among states and many other factors are relevant. All settlements are the result of negotiation, so the agreement of the parties in an arm's length negotiation is also an important factor in determining the scope of any settlement agreement.

16. In response to the VW violations, EPA began conducting additional confirmatory testing on all diesel vehicles in an effort to identify any additional concerns or potential violations across the light-duty diesel fleet. At the time of the Committee's initial hearing on VW, an employee in your office, Mr. Grundler, testified that the testing had just commenced but committed to keeping the Committee informed of your progress and results. In addition, he also testified that he did not have concerns with diesel technology in general and did not expect to find widespread problems.

- a. What is the current status of the additional confirmatory testing initiated by EPA in the wake of the VW violations?
- b. In the course of this testing, has EPA identified any other defeat devices or violations of the Clean Air Act?
 - i. [If yes]: What did you discover and what action did the agency take?
 - ii. [If no]: In that case, has the agency informed the public about these results?
 - 1. If not, why not?
- c. Based on the results of this testing, do you believe diesel technology remains a viable option for automakers to improve fuel economy and reduce emissions?

Response: It is essential that the EPA maintain an active compliance and oversight presence and to constantly adjust our protocols in ways that manufacturers can not anticipate. In September, 2015, just after announcing the VW violations, the EPA informed manufacturers that the agency would expand its confirmatory testing process to screen for defeat devices. The EPA has done just that, and it was this program that helped to uncover the defeat devices in the 3.0 liter Volkswagen vehicles.

At the same time, the vast majority of manufacturers both foreign and domestic have demonstrated through extensive Agency testing that their vehicles do comply with stringent emission standards in all types of normal vehicle operation. This reinforces our determination to continue to apply rigorous oversight, to change up our testing as circumstances and technologies change, and to hold manufacturers accountable if we do find issues.

The Honorable Markwayne Mullin

1. Electric vehicles qualify for grants that are worth 75 percent of their cost when acquired by a private fleet or business but other clean technologies receive only 25 percent. Why do electric vehicles receive a much higher level of funding than other clean vehicle technologies?

Response: Under the Decree, clean technologies receive a range of funding levels, depending on the capital costs of the technology, the emissions produced by the technology, and the status of the beneficiary (government or non-government owned). EPA drew from its experience administering DERA, and negotiated the terms of the Decree with a goal to make the best use of the money to reduce emissions while providing flexibility for state selection of projects.

2. Under the DERA Program, 35 percent is provided to offset the cost for private fleets that purchase a new replacement vehicle powered by a low-NOx engine. The settlement only provides 25 percent for these same trucks or vehicles. Why doesn't the EMT provide the 35 percent allowed by the DERA program for new low-NOx engines?

Response: The Decree is separate and apart from the DERA Program. The DERA Program has program elements, specifications and parameters based on its authorizing statute and program goals and therefore the percentages of funding offered will vary.

3. New natural gas trucks have been certified to emission standards that are 90 percent cleaner than today's emission standard for NOx. Even though these trucks are much cleaner than current diesel vehicles, they receive the same level of funding under the settlement. Why isn't there any differentiation in the level of funding for technology that is much cleaner?

Response: Compressed Natural Gas (CNG) engines are certified to the same 2010 EPA emissions standard for NOx as diesel engines. The Decree does not provide different funding options for CNG compared to other types of engines so that beneficiaries have flexibility to select projects that suit their goals.

4. The DERA program provides funding to offset up to 45 percent of the cost of a new electric vehicle, but the settlement fund provides 75 percent for private fleets. Why was the funding level for private fleets increased so significantly in the case of electric vehicles but not for other clean technologies?

Response: The Decree is separate and apart from the DERA Program. The DERA Program has program elements, specifications and parameters based on its authorizing statute and program goals and therefore the percentages of funding offered will vary.

5. The Environmental Mitigation Trust allows beneficiaries to use settlement funds to pay for fueling infrastructure for electric vehicles but not for other alternative fuels like propane or natural gas. Why are funds provided only for electric vehicle charging stations but not infrastructure for other clean fuel vehicles?

Response: The Mitigation Trust allows states to put mitigation funds toward other lower emissions technologies. The eligible projects specifically include replacing diesel emission sources with cleaner technologies to reduce NOx, and these specifically include both propane and natural gas. In addition to these provisions, states can also use up to 15% of the funds to support ZEV infrastructure. ZEV infrastructure includes both electric charging and hydrogen fueling.

- EPA's November 18, 2016 letter to Chairman Upton and Subcommittee Chairman Murphy indicates that the ZEV Trust Fund is intended to "address the broader harm to the clean vehicle market."
 - a. Were electric vehicles the only clean vehicle technology harmed by Volkswagen's actions?
 - b. What evidence is available to suggest this is the case and was the harm limited to light duty vehicles?

Response: The definition of zero emission vehicle used in the Decree includes both electric and hydrogen vehicles. The mitigation trust provisions of Appendix D allow states to select emissions reducing technologies to replace diesel engines. The Appendix C provisions are about zero emitting vehicles. In its enforcement cases, the EPA tailors the remedy to the facts of a particular case, and focuses the remedy on the particular harm.

The Decree includes controls on the work that Volkswagen will undertake as part of the ZEV investments. Volkswagen is required to solicit and consider input; the company must adhere to specific and detailed creditable cost guidance; the charging infrastructure must be accessible to all

vehicles utilizing non-proprietary connectors; and plans must be developed for each of four 30-month investment cycles. In addition, there are strong accountability provisions including an obligation to comply with all laws, the same as any other company must do. If Volkswagen engages in any anti-competitive behavior, it can be held accountable in the same way any other company could. Volkswagen cannot do anything under the Decree that it could not have done without EPA's enforcement action. There are also public transparency requirements that will provide the public, and participants in the market, considerable information on Volkswagen's activities, and allow them to comment and make suggestions on Volkswagen's plans, so Volkswagen's competitors will have a much bigger window into Volkswagen's operations than is true of any other company.

The EPA does not make the investment decisions; EPA's role is to ensure that Volkswagen follows all of the requirements of the Decree. The EPA will not be evaluating, nor would it be appropriate to evaluate, the impact of Volkswagen's investments on individual companies. The provisions of the Decree that are summarized above are intended to ensure an accountable process for Volkswagen's investment decisions and implementation.

13

 \bigcirc