

DIESELGATE: HOW THE INVESTIGATION, PROSECUTION,
AND SETTLEMENT OF VOLKSWAGEN’S EMISSIONS
CHEATING SCANDAL ILLUSTRATES THE NEED FOR ROBUST
ENVIRONMENTAL ENFORCEMENT

John C. Cruden

Bethany Engel

Nigel Cooney

*Joshua Van Eaton**

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* John C. Cruden was the Assistant Attorney General for the Environment and Natural Resources Division of the United States Department of Justice from 2015 to 2017. Bethany Engel and Joshua Van Eaton are Senior Attorneys, and Nigel Cooney is a Trial Attorney in the same Division. This article tells the story from the perspective of these Department of Justice attorneys who were intimately involved in the litigation and settlement discussions with Volkswagen. The views expressed in this article are those of the authors alone and do not necessarily reflect the views of the Department of Justice or the United States. The authors dedicate this Article to the devoted federal and state public servants that contributed to the successful prosecution of this historic Clean Air Act case.

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I. INTRODUCTION

Knowledge of Volkswagen’s¹ illegal shirking of emissions regulations became public in the fall of 2015 and soon became an international scandal for the well-respected company that was, at that time, the largest automobile manufacturer in the world.² Earlier that summer, Assistant

¹ For purposes of this article, unless otherwise specified, “Volkswagen” includes the following defendants in *United States v. Volkswagen AG*, No. 16-cv-10006 (E.D. Mich. Jan. 4, 2016): Volkswagen AG, Volkswagen Group of America, Inc., Volkswagen Group of America Chattanooga Operations, LLC, Audi AG, Dr. Ing. H.c. F. Porsche AG, and Porsche Cars North America, Inc.

² INT’L ORG. OF MOTOR VEHICLE MFRS., WORLD RANKING OF MANUFACTURERS, YEAR 2015, <http://www.oica.net/wp-content/uploads/ranking2015.pdf>. See also INT’L ORG. OF MOTOR VEHICLE MFRS., WORLD RANKING OF MANUFACTURERS, <http://www.oica.net/wp-content/uploads/World-Ranking-of-Manufacturers.pdf>; Bertel Schmitt, *It’s Official: Volkswagen Is World’s Largest Automaker In 2016. Or Maybe Toyota.*, FORBES (Jan. 30, 2017), <https://>

Attorney General John Cruden of the U.S. Department of Justice's ("DOJ") Environment and Natural Resources Division had received the initial call alerting him to allegations of misconduct by Volkswagen from Cynthia Giles, the Environmental Protection Agency's ("EPA") Assistant Administrator for the Office of Enforcement and Compliance Assurance. These allegations that Volkswagen had utilized illegal "defeat devices" in the software of their diesel vehicles clearly had both civil and criminal implications.

In short order the regulatory agencies with responsibility for the oversight of automobile emissions, EPA and the California Air Resources Board ("CARB"), initiated administrative actions under the Clean Air Act ("CAA") and analogous state authority. Thousands of car owners filed suit in courts across the United States, and the federal government began parallel civil and criminal investigations. Coincidentally, this revelation occurred almost simultaneously with the completion of the United States' settlement agreement with BP, resolving the Deepwater Horizon oil spill tragedy that resulted in the deaths of eleven people and injuries to forty others, as well as over three million barrels of oil spilled in the Gulf of Mexico, adversely affecting the environment and the economic well-being of the five Gulf States. The United States' settlement with BP was being finalized just as DOJ's Volkswagen civil and criminal litigating teams were getting underway.³

By the time the United States filed its civil complaint against Volkswagen in early January 2016, the federal Judicial Panel on Multidistrict Litigation ("JPML") had already consolidated pending private actions in San Francisco and Judge Charles R. Breyer had been selected as presiding judge. Shortly thereafter, Judge Breyer appointed former FBI Director Robert S. Mueller III as Settlement Master. One year later, the DOJ Environmental Enforcement Section ("EES"), on behalf of EPA, had successfully completed three voluminous consent decrees, Volkswagen had pled guilty to four felonies, and seven high ranking Volkswagen officials had been indicted. The cumulative value of the

www.forbes.com/sites/bertelschmitt/2017/01/30/its-official-volkswagen-worlds-largest-automaker-2016-or-maybe-toyota/.

³ For more information about the Deepwater Horizon settlements, see John C. Cruden, Steve O'Rourke & Sarah D. Himmelhoch, *The Deepwater Horizon Oil Spill Litigation: Proof of Concept for the Manual for Complex Litigation and the 2015 Amendments to the Federal Rules of Civil Procedure*, 6 MICH. J. ENVTL. & ADMIN. L. 65 (2016). Judge Barbier's effective use of the Manual for Complex Litigation in the BP case, and the critical participation by both the magistrate judge and the special master, created an important model for future cases involving both government environmental enforcement claims and private class action plaintiff claims. The Volkswagen litigation presented just such a case where many of the same procedural tools were used.

relief attained by DOJ exceeded \$20 billion, the most in the history of United States CAA enforcement.

Part II of this article will discuss what Volkswagen did, how it was discovered, the claims brought against Volkswagen by various parties, and the consolidation and organization of the resulting multidistrict litigation (“MDL”). Part III will discuss mobile source enforcement under the CAA, the United States’ civil complaint, and the resolution of civil claims against Volkswagen. Part IV will discuss the criminal enforcement response, including Volkswagen’s corporate plea agreement and indictments of a number of Volkswagen officials. Part V will discuss the importance of the case and some lessons learned that may influence future environmental litigation.

II. DEFEAT DEVICE DEVELOPMENT, DISCOVERY, AND RESPONSE

A. Volkswagen Background

In 1934, Ferdinand Porsche was commissioned by Adolf Hitler to develop the German “people’s car,” the “Volkswagen.”⁴ Porsche, who was widely renowned as a gifted engineer and even a “designer genius,” beat out fierce competition to turn the notion of a driving German citizen class into reality. The first prototypes of what would eventually become famously known as the “Beetle” were built by hand in Porsche’s own garage. The German government eventually decided to build a factory to produce Volkswagens, which Porsche also helped design after touring several American auto factories. Construction of the facility started in 1938 in what is now the town of Wolfsburg.

During the six years following the beginning of WWII in September 1939, the Volkswagen factory and its equipment largely escaped destruction from Allied bombs. During the post-war occupation, the northwest part of Germany, including Lower Saxony, the area that contains the city of Wolfsburg, was fortuitously (for Volkswagen) located in the British Zone. The British were concerned with Germany’s economic revitalization and kept factories operating, building a fleet of occupation vehicles.

Volkswagen ultimately emerged post-war with its founder’s reputation for superior vehicle engineering and visionary design intact, and began to

⁴ The history of Volkswagen is well documented. This discussion is intended to provide only the most basic context. The few historical references in this article originate from the book ANDREA HIOTT, *THINKING SMALL: THE LONG, STRANGE TRIP OF THE VOLKSWAGEN BEETLE* (2012). In the book, Hiott sets forth the companion stories of the development and global distribution of the Volkswagen Beetle and rise of the Doyle Dane Bernbach advertising agency, who introduced the Beetle to the United States through its iconic “Think Small” advertising campaign in 1960.

steadily build that reputation around the globe for decades to follow. Volkswagen became the largest auto manufacturer in Europe, and eventually the entire world.⁵ From its beginning, Volkswagen's hallmark had been strict engineering standards and lofty expectations. But around May 2006, the high expectations within the company surpassed its engineering standards and capabilities, and when the engineering could no longer keep pace with expectations, Volkswagen decided to cheat.⁶ Volkswagen set a course to deceive U.S. regulators—and allegedly regulators around the globe—regarding its diesel vehicles' compliance with emissions standards.

B. Discovery of the Volkswagen TDI Diesel Defeat Devices

1. The International Council on Clean Transportation and the Center for Alternative Fuels, Engines and Emissions

In May 2014, the Center for Alternative Fuels, Engines and Emissions (“CAFEE”) at West Virginia University published a report titled “In-Use Emissions Testing of Light-Duty Diesel Vehicles in the United States.”⁷ The International Council on Clean Transportation (“ICCT”) commissioned the study in 2013 to conduct in-use emissions tests using a portable emissions measurement system (“PEMS”) on three light-duty diesel vehicles that had been certified to U.S. EPA (Tier 2-Bin 5) and California (LEV- II ULEV) emission standards.⁸ The study was part of a larger meta-analysis of PEMS data from European Union and United States diesel passenger cars analyzing the gaps between real world emissions and the regulatory certification levels, ostensibly to demonstrate the effectiveness of U.S. emissions regulations compared to the less stringent European standards.⁹

Two of the three test vehicles used for the CAFEE Study were Volkswagen models, a Passat and a Jetta. The study revealed that those two vehicles, both using 2.0 liter engines,¹⁰ had excessively high on-road

⁵ INT'L ORG. OF MOTOR VEHICLE MFRS, *supra* note 2.

⁶ Plea Agreement, Exhibit 2 Statement of Facts, paras. 31-36, United States v. Volkswagen AG, No. 16-CR-20394 (E.D. Mich. Mar. 10, 2017), ECF No. 68 [hereinafter SOF].

⁷ GREGORY J. THOMPSON, CTR. FOR ALTERNATIVE FUELS, ENGINES & EMISSIONS, IN-USE EMISSIONS TESTING OF LIGHT-DUTY DIESEL VEHICLES IN THE UNITED STATES (2014) [hereinafter CAFEE Study].

⁸ *Id.* at 1.

⁹ VICENTE FRANCO ET AL., THE INT'L COUNCIL ON CLEAN TRANSP., REAL-WORLD EXHAUST EMISSIONS FROM MODERN DIESEL CARS: A META-ANALYSIS OF PEMS EMISSIONS DATA FROM EU (EURO 6) AND US (TIER 2 BIN 5/ ULEV II) DIESEL PASSENGER CARS 4-5 (2014).

¹⁰ 2.0 liter and 3.0 liter engines are referenced throughout this article. Essentially, 2.0 liter engines were used in smaller passenger cars and 3.0 liter engines were used in larger sedans and sport utility vehicles. SOF, *supra* note 6, paras. 23-24.

emissions when tested with a PEMS unit, emitting nitrogen oxides (“NOx”) at values far above permissible limits during road testing.¹¹ The CAFEE engineers reported their findings to Volkswagen, CARB, and EPA. This started the federal and state investigations as well as the Volkswagen cover up.

2. Volkswagen’s Cover Up

The results of the CAFEE study brought intense scrutiny of the Volkswagen vehicles and their emissions test results from U.S. regulators. CARB, in coordination with EPA, began repeatedly and intensely questioning representatives from Volkswagen about the CAFEE study findings, seeking technical explanations for the results.¹² Volkswagen formed an ad hoc task force to formulate responses to the regulators’ questions.¹³ The group did not disclose to EPA and CARB the defeat devices and other problems with the vehicles.¹⁴ Instead they appeared to cooperate by answering the regulators’ questions in part, but continued to conceal use of the defeat devices by providing various false or incomplete reasons for the emissions discrepancies.¹⁵

Over the months that followed, Volkswagen repeatedly put forth false and misleading explanations to agency officials.¹⁶ In December 2014, the regulators began to conduct confirmatory testing that would generate independent emissions data.¹⁷ With growing frustration over Volkswagen’s inability to provide a satisfactory technical explanation for the emissions results, the federal and state regulators threatened not to certify Volkswagen model year 2016 2.0 liter diesel vehicles for sale in the United States unless Volkswagen could adequately explain the emissions discrepancies.¹⁸

In August 2015, Volkswagen supervisors approved a script for Volkswagen employees to use in an upcoming meeting with CARB.¹⁹ The script was designed to obtain approval for Volkswagen to sell model year 2016 2.0 liter diesel vehicles while continuing to conceal the defeat devices and other deficiencies.²⁰ In other words, Volkswagen was

¹¹ CAFEE Study, *supra* note 7, at 62-63.

¹² Complaint, para. 86, United States v. Volkswagen AG, No. 16-cv-10006 (E.D. Mich. Jan. 4, 2016), ECF No. 1 [hereinafter Complaint]; SOF, *supra* note 6, at para. 53.

¹³ SOF, *supra* note 6, at para. 54.

¹⁴ *Id.*

¹⁵ *Id.* See also *id.* at paras. 55, 58.

¹⁶ *Id.* at paras. 60-61.

¹⁷ Complaint, *supra* note 12, at para. 89.

¹⁸ SOF, *supra* note 6, at para. 59.

¹⁹ *Id.* at para. 61.

²⁰ *Id.*

prepared to provide many technical-sounding explanations to obtain certification, thereby obscuring the truth. On August 19, 2015, in a meeting with CARB at its facility in El Monte, California, a Volkswagen employee attending the meeting went off-script and, defying the instructions from supervisors, explained for the first time to regulators that the cars contained the test cycle-beating software.²¹ On September 3, 2015, in a meeting with officials from CARB and EPA, Volkswagen officially admitted to using a defeat device in the 2.0 liter diesel vehicles.²²

3. *The First EPA Notice of Violation – 2.0 Liter Vehicles*

After years of Volkswagen improperly advertising and promoting their “clean diesel” vehicles, deceiving regulators and consumers in the process, on September 18, 2015, EPA lifted the veil on Volkswagen’s deception by issuing a Notice of Violation (“NOV”) pertaining to nearly half a million vehicles equipped with 2.0 liter diesel engines.²³ EPA issued a press release describing the violations and posted the 2.0 Liter NOV on its website for the public to see.²⁴

The 2.0 Liter NOV made official EPA’s view that Volkswagen had manufactured and installed defeat devices in certain model year 2009 through 2015 diesel light-duty vehicles.²⁵ Defeat devices violated the CAA, and the presence of the defeat devices in vehicles meant that the vehicles did “not conform in all material respects to the vehicle specifications” described in Volkswagen’s applications for certificates of conformity.²⁶ In short, the NOV alleged that the vehicles were illegally sold in the United States. The impacted vehicles included popular

²¹ *Id.* at para. 62.

²² *Id.* at para. 63.

²³ Letter from Phillip A. Brooks, Director, Air Enforcement Division, EPA, to Volkswagen AG, Audi AG, and Volkswagen Group of America, Inc. (Sept. 18 2015), <https://www.epa.gov/sites/production/files/2015-10/documents/vw-nov-cao-09-18-15.pdf> [hereinafter 2.0 L NOV]. On the same day, CARB issued to Volkswagen an in-use compliance letter, which revealed that Volkswagen had admitted to using a defeat device in its 2.0 liter diesel vehicles. Letter from Annette Hebert, Chief, Emissions Compliance, Automotive Regulations and Science Division, CARB, to Volkswagen AG, Audi AG, and Volkswagen Group of America, Inc. (Sept.18, 2015), https://www.arb.ca.gov/newsrel/in_use_compliance_letter.htm.

²⁴ Press Release, EPA, EPA, California Notify Volkswagen of Clean Air Act Violations (Sept. 18, 2015), https://19january2017snapshot.epa.gov/newsreleases/epa-california-notify-volkswagen-clean-air-act-violations-carmaker-allegedly-used_.html.

²⁵ 2.0 L NOV, *supra* note 23, at 1.

²⁶ *Id.* at 1-2. See discussion *infra* at Part III.A.1.a. for an explanation regarding the application process and certificate of conformity coverage.

passenger car models such as the Volkswagen Jetta, Golf, Passat, Beetle, and Audi A3.²⁷

In the 2.0 Liter NOV, EPA described how Volkswagen had installed software in the electronic control module (“ECM”) of the vehicles that sensed when the vehicle was being tested for emissions compliance.²⁸ The software detected various inputs such as the position of the steering wheel, vehicle speed, the duration of the engine’s operation and barometric pressure, precisely tracking the parameters of the federal test procedures (“FTP”) used for emissions testing and EPA certification purposes.²⁹ The 2.0 Liter NOV alleged that when the Volkswagen software detected testing parameters, the ECM operated its “‘dyno calibration’ (referring to the equipment used in emissions testing, called a dynamometer),” producing compliant emissions results for the testing.³⁰ At all other times during normal vehicle operation, the ECM operated its “‘road calibration’ which reduced the effectiveness of the emission control system.”³¹ As a result, emissions of NOx increased by a factor of up to 40 times legal limits when not under testing conditions.³²

On September 21, 2015, three days after EPA issued the 2.0 Liter NOV, Volkswagen issued a stop sale order covering all of its 2.0 liter diesel engine models in the United States.³³ The following day, Volkswagen revealed that its emission control-evading software did not merely affect car models sold in the United States, but was present in 11 million cars worldwide.³⁴ Volkswagen also announced that it was setting aside approximately \$7.3 billion to cover the anticipated cost of repairing the vehicles.³⁵ The next day, September 23, 2015, Volkswagen AG CEO Prof. Dr. Martin Winterkorn resigned, stating that he was “stunned that misconduct on such a scale was possible in the Volkswagen Group.”³⁶ Matthias Mueller, then Chairman of Porsche AG, was named as the new

²⁷ 2.0 L NOV, *supra* note 23, at 5.

²⁸ *Id.* at 3.

²⁹ *Id.*

³⁰ *Id.* at 4.

³¹ *Id.*

³² *Id.*

³³ VW Diesel Crisis: Timeline of Events, CARS.COM (Dec. 7, 2017), <https://www.cars.com/articles/vw-diesel-crisis-timeline-of-events-1420681251993/>.

³⁴ *Id.* See also Transcript of Proceedings at 11, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Feb. 25, 2016), ECF No. 1270.

³⁵ VW Diesel Crisis, *supra* note 33.

³⁶ Press Release, Volkswagen, Statement by Prof. Dr. Winterkorn (Sept. 23, 2015), https://www.volkswagen-media-services.com/en/detailpage/-/detail/Statement-by-Prof-Dr-Winterkorn/view/2721302/7a5bbec13158edd433c6630f5ac445da?p_auth=y1muovrJ.

CEO of Volkswagen AG on September 25, 2015.³⁷ Ostensibly, the change was intended to win back the trust of customers and regulators.³⁸ However, Mr. Mueller got off to a rocky start when, responding to a question from a National Public Radio reporter at the Detroit Auto show on January 11, 2016, he suggested that the underlying problem was technical, not ethical, that Volkswagen “didn’t lie,” and that Volkswagen had been working since 2014 to solve the problem.³⁹ None of these assertions was ultimately vindicated.

In the wake of the 2.0 Liter NOV, Volkswagen Group of America CEO Michael Horn was summoned to Capitol Hill to testify before Congress. On October 8, 2015, Mr. Horn appeared before the House Committee on Energy and Commerce Subcommittee on Oversight and Investigations.⁴⁰ In a prepared statement, Mr. Horn apologized for Volkswagen’s “use of a software program that served to defeat the regular emissions testing regime.”⁴¹ When asked by Congressman Joe Barton whether the decision to use defeat devices was made in Germany at the corporate level, Mr. Horn answered that it was “not a corporate decision” but one made by “a couple of software engineers.”⁴² Mr. Barton asked a follow-up question:

Mr. BARTON. Do you really believe, as good, as well-run as Volkswagen has always been reported to be, that senior-level corporate, managers/administrators had no knowledge for years and years?

³⁷ Press Release, Volkswagen, Matthias Müller Appointed CEO of the Volkswagen Group (Sept. 25, 2015), <https://www.volkswagenag.com/en/news/2015/9/CEO.html> [hereinafter Müller Press Release]. Within months of the 2.0 Liter NOV revelations, Volkswagen AG installed not only a new CEO (Matthias Müller), but also a new General Counsel (Manfred Doess), and Volkswagen Group of America CEO Michael Horn and General Counsel David Geanacopoulos were replaced by Hinrich Woebcken and David Detweiler, respectively. See *VW Diesel Crisis*, *supra* note 33; Press Release, Volkswagen, David Detweiler Appointed New Executive Vice President and General Counsel (Feb. 4, 2016), <https://media.vw.com/en-us/releases/639>.

³⁸ Müller Press Release, *supra* note 37 (“[M]y most urgent task is to win back trust for the Volkswagen Group.”).

³⁹ Sonari Glington, ‘We Didn’t Lie,’ Volkswagen CEO Says of Emissions Scandal, NAT’L PUB. RADIO (Jan. 11, 2016), <https://www.npr.org/sections/thetwo-way/2016/01/11/462682378/we-didnt-lie-volkswagen-ceo-says-of-emissions-scandal>.

⁴⁰ *Volkswagen’s Emissions Cheating Allegations: Initial Questions: Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. on Energy and Commerce*, 114th Cong. (2015) (statement of Michael Horn, President and CEO of Volkswagen Group of America, Inc.), <http://docs.house.gov/meetings/IF/IF02/20151008/104046/HHRG-114-IF02-Wstate-HornM-20151008.pdf>.

⁴¹ *Id.* at 1.

⁴² *Volkswagen’s Emissions Cheating Allegations: Initial Questions: Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. on Energy and Commerce*, 114th Cong. 59 (2015) (preliminary transcript), <http://docs.house.gov/meetings/IF/IF02/20151008/104046/HHRG-114-IF02-Transcript-20151008.pdf>.

Mr. HORN. I agree it's very hard to believe.⁴³

Mr. Horn resigned as CEO of Volkswagen Group of America a few months later on March 9, 2016.⁴⁴

4. *The Second EPA Notice of Violation – 3.0 Liter Vehicles*

In early 2015, during the same period of time that CARB and EPA were investigating the 2.0 liter diesel vehicle emissions, CARB informed Volkswagen that CARB would not approve certification for the model year 2016 3.0 liter diesel vehicles until Audi, the 3.0 liter engine developer, confirmed that the 3.0 liter vehicles did not possess the same emissions issue as the 2.0 liter cars that had been identified in the CAFEE study.⁴⁵ Audi presented technical information to CARB and answered related questions, but did not disclose the presence of a defeat device or other emissions issues in the 3.0 liter vehicles.⁴⁶ Consequently, CARB issued an executive order approving the sale of the model year 2016 3.0 liter vehicles.⁴⁷

Volkswagen did not disclose to EPA or CARB the presence of a defeat device in its 3.0 liter vehicles when it finally admitted to the 2.0 liter defeat device, nor did it do so after EPA issued the 2.0 Liter NOV.⁴⁸ Even after EPA announced to vehicle manufacturers and the public on September 25, 2015, that it would perform additional testing “using driving cycles and conditions that may reasonably be expected to be encountered in normal operation and use, for the purposes of investigating a potential defeat device,”⁴⁹ Volkswagen did not disclose the existence of a 3.0 liter defeat device.

As the agency indicated it would, EPA conducted confirmatory testing on vehicles that included Volkswagen 3.0 liter diesel vehicles.⁵⁰ This testing led to EPA's issuance of another NOV to Volkswagen on November 2, 2015, covering approximately 90,000 additional vehicles

⁴³ *Id.* at 32.

⁴⁴ *VW Diesel Crisis*, *supra* note 33.

⁴⁵ SOF, *supra* note 6, at para. 65.

⁴⁶ *Id.* at para. 66.

⁴⁷ *Id.* EPA issued a corresponding certificate of conformity for EPA Test Group GVGJ03.0NU4, covering the same vehicles. *See* Letter from Susan Shinkman, Director, Office of Civil Enforcement, EPA, to Volkswagen AG, Audi AG, Porsche AG, Volkswagen Group of America, Inc., and Porsche Cars North America, Inc. 5 (Nov. 2, 2015), <https://www.epa.gov/sites/production/files/2015-11/documents/vw-nov-2015-11-02.pdf> [hereinafter 3.0 L NOV].

⁴⁸ *See* SOF, *supra* note 6, at para. 66.

⁴⁹ 3.0 L NOV, *supra* note 47, at 4-5 (quoting EPA, *EPA Conducted Confirmatory Testing* (Sept. 25, 2015)).

⁵⁰ EPA's confirmatory testing was performed in conjunction with similar testing performed by CARB and Environment Canada. *Id.* at 4.

equipped with 3.0 liter diesel engines.⁵¹ The vehicles included model years 2014 through 2016 sport utility and luxury diesel vehicles, among them the Volkswagen Touareg, Audi models A6, A7, A8, Q5, and the Porsche Cayenne. The 3.0 Liter NOV alleged violations similar to those in the 2.0 Liter NOV—that software in the ECM caused the vehicle to perform differently when being tested for compliance with emission standards than in normal operation and use.⁵²

The 3.0 Liter NOV also alleged that the 3.0 liter vehicles employed a “temperature conditioning mode” and a timer to activate emission controls during testing, but not during normal vehicle operation, resulting in tailpipe NOx emissions up to nine times above EPA compliant standards when not under testing conditions.⁵³ On the same day that EPA issued the 3.0 Liter NOV, Volkswagen issued a public statement contradicting the NOV by claiming that “no software has been installed in the 3-liter V6 diesel power units to alter emissions characteristics in a forbidden manner.”⁵⁴ Volkswagen specifically denied using a defeat device in the 3.0 liter vehicles. Less than three weeks later, representatives from Audi AG admitted to EPA that the 3.0 liter vehicles contained at least three undisclosed auxiliary emission control devices (“AECDS”),⁵⁵ and conceded that one of them met the criteria of a “defeat device” under United States law.⁵⁶

C. Civil Multi-District Litigation

1. Initiation of Private Lawsuits

The Volkswagen emissions scandal created widespread injury which affected hundreds of thousands of past and current vehicle owners, lessees, dealers, securities holders, and other private plaintiffs. Following the issuance of the 2.0 Liter NOV by EPA, the federal courts were inundated with private lawsuits. The first such lawsuit, *Fiol v. Volkswagen Group of America, Inc.*, was filed in the Northern District of California on September 18, 2015, the very day that the NOV became public.⁵⁷ Just three days later, there were at least 20 actions pending in

⁵¹ *Id.* at 5.

⁵² *Id.* at 4.

⁵³ *Id.*

⁵⁴ SOF, *supra* note 6, at para. 68.

⁵⁵ *Id.* at para. 69.

⁵⁶ *Id.* See *infra* Section III.A.1.a. for discussion of AECDS and defeat devices.

⁵⁷ *Fiol v. Volkswagen Group of America, Inc.*, No. 15-cv-04278-CRB (N.D. Cal. Sept. 18, 2015).

seven different jurisdictions across the United States.⁵⁸ Each of these actions alleged that owners or lessees of 2.0 liter diesel vehicles had been misled by Volkswagen when the car company stated that the subject vehicles were clean and fuel efficient. The cases utilized common legal theories of recovery, including misrepresentation, concealment, unfair business practices, and breach of consumer protection laws.⁵⁹

The many cases filed against Volkswagen all over the country were ripe for consolidation by the Judicial Panel on Multidistrict Litigation. The JPML is a special judicial body created by Congress, for the purpose of coordinating or consolidating civil proceedings when civil actions involving one or more common questions of fact are pending in different judicial districts.⁶⁰ The multidistrict litigation statute “was enacted as a means of conserving judicial resources in situations where multiple cases involving common questions of fact were filed in different districts,” and is meant “to assure uniform and expeditious treatment in [] pretrial procedures.”⁶¹ The JPML decides whether to consolidate various district court actions and if so, selects the district court and presiding judge. Given the level of widespread injury caused by the Volkswagen emissions scandal, multidistrict coordination through the JPML was an essential and inevitable first step in the process to litigate and ultimately resolve the lawsuits filed in the wake of Volkswagen’s unlawful conduct becoming known to the public.

2. Formation of the VW Multidistrict Litigation

The initial motion seeking transfer for purposes of creating a Volkswagen MDL was filed on September 23, 2015.⁶² The JPML convened and heard argument regarding that motion and related motions on December 3, 2015 in New Orleans. More than two dozen attorneys entered an appearance in the hearing, representing various plaintiffs from across the country and various named defendants. All of the attorneys appearing at the hearing agreed that coordinated or consolidated proceedings under the MDL statute were appropriate, but the parties disagreed on where the cases should be heard.⁶³

⁵⁸ Brief of Christopher J. D’Angelo at 4, In re: Volkswagen “Clean” Diesel Liab. Litig., MDL No. 2672 (J.P.M.L. Sept. 23, 2015), ECF No. 1-1.

⁵⁹ *Id.* at 7.

⁶⁰ See 28 U.S.C. § 1407 (2012).

⁶¹ *Royster v. Food Lion*, 73 F.3d 528, 531-32 (4th Cir. 1996); In re Phenylpropanolamine Prod. Liab. Litig., 460 F.3d 1217, 1230 (9th Cir. 2006) (citation omitted).

⁶² Brief of Christopher J. D’Angelo, *supra* note 58, at 1.

⁶³ The United States filed an Interested Party Response suggesting that the cases should be consolidated in the Eastern District of Michigan. U.S. Statement of Interest and Interested Party Response to Motions to Transfer, In re: Volkswagen “Clean” Diesel Liab. Litig., MDL No. 2672

After hearing from the various counsel at the hearing, the JPML issued its decision five days later.⁶⁴ The court noted that no party opposed centralization, but that twenty-eight separate transferee districts had been nominated by the various litigants.⁶⁵ The court ultimately chose to transfer the then-pending sixty-three actions before the JPML (as well as the 451 potentially related actions that by this time had been filed in over sixty districts across the country) to Judge Breyer in the Northern District of California for MDL centralization. Judge Breyer was a distinguished judge with nearly twenty years of experience in the district court, and was “thoroughly familiar with the nuances of complex, multidistrict litigation by virtue of having presided over nine MDL dockets.”⁶⁶

Judge Breyer wasted no time in convening MDL No. 2672, *In re Volkswagen “Clean Diesel” Marketing, Sales Practices, and Products Liability Litigation*. His first Pretrial Order setting the initial case management conference for December 22, 2015 was issued the day after the JPML issued its transfer order.⁶⁷

3. *The United States’ Civil Suit*

The United States then commenced its own suit. On January 4, 2016, the United States filed a civil CAA complaint in the Eastern District of Michigan against six Volkswagen, Audi and Porsche entities, alleging, among other things, that Volkswagen sold 2.0 liter and 3.0 liter diesel vehicles in the United States without EPA certification and that those cars contained defeat devices.⁶⁸ The United States’ case was swiftly transferred to the MDL.⁶⁹ This was only the second time in EES history that it had joined an MDL, the first being the recently concluded Deepwater Horizon case. Consequently, EES as well as then- Assistant Attorney General Cruden, had recent MDL experience which they could draw upon. The timing of the United States’ entry into the MDL was

(J.P.M.L. Oct. 20, 2015), ECF No. 378. The EPA’s Office of Transportation and Air Quality, National Vehicle and Fuel Emissions Laboratory, which administers EPA’s vehicle certification program, is located in Ann Arbor, MI, which lies within that district. *Id.* at 5. In addition, the U.S. Attorney’s Office for the Eastern District of Michigan was the lead office in DOJ’s criminal investigation.

⁶⁴ *In re Volkswagen “Clean Diesel” Mktg., Sales Practices, & Prods. Liab. Litig.*, 148 F. Supp. 3d 1367 (J.P.M.L. 2015).

⁶⁵ *Id.* at 1368.

⁶⁶ *Id.* at 1369-70.

⁶⁷ Pretrial Order No.1, *In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig.*, No. 3:15-md-02672-CRB (N.D. Cal. Dec. 9, 2015), ECF No. 2.

⁶⁸ See Complaint, *supra* note 12. The United States’ complaint is discussed in more detail in Section III.B.1., *infra*.

⁶⁹ Conditional Transfer Order (CTO-14), *In re Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig.*, MDL No. 2672 (J.P.M.L. Jan. 15, 2016), ECF No. 1106.

critical in order to lead the environmental litigation against Volkswagen, and ensure that the environment was made whole, the cars were appropriately dealt with, and that Volkswagen paid an appropriate penalty for flouting environmental laws.

On January 21, 2016, Judge Breyer appointed a lead Plaintiff's counsel and Plaintiff's Steering Committee to represent the interests of the multitude of private claimants and a government coordinating counsel to act on behalf of governmental interests, and the litigation got underway in earnest.

4. MDL Management and Organization

Marshalling the vast number of claimants and types of claims into a cohesive MDL required a herculean effort by both the Court and the parties. Judge Breyer set securities actions against Volkswagen on a separate track,⁷⁰ but the thousands of remaining cases, both the private consumer actions and the United States' Clear Air Act case, were left to be managed and litigated together. Judge Breyer also appointed former FBI Director Robert S. Mueller III as Settlement Master.⁷¹ Counsel representing private and governmental interests quickly set to work crafting nearly two dozen pretrial orders to govern the litigation. These orders were deployed to set a discovery schedule,⁷² shield confidential information used in the MDL,⁷³ establish privilege among the plaintiffs and among the defendants to allow for the efficient management of the MDL,⁷⁴ govern document preservation,⁷⁵ protect privilege,⁷⁶ produce documents and ESI,⁷⁷ and lay out protocols governing expert discovery⁷⁸

⁷⁰ See Pretrial Order No. 4, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 5, 2016), ECF No. 545.

⁷¹ Pretrial Order No. 6, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 19, 2016), ECF No. 973.

⁷² Pretrial Order No. 9, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Feb. 25, 2016), ECF No. 1252.

⁷³ Pretrial Order No. 12, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Feb. 25, 2016), ECF No. 1255.

⁷⁴ Pretrial Order No. 14, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Mar. 4, 2016), ECF No. 1326.

⁷⁵ Pretrial Order No. 15, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Mar. 24, 2016), ECF No. 1379.

⁷⁶ Pretrial Order No. 16, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Mar. 29, 2016), ECF No. 1387.

⁷⁷ Pretrial Order No. 18, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 4, 2016), ECF No. 1483 (Nearly 25 million pages of documents were produced in the MDL.).

⁷⁸ Pretrial Order No. 19, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 19, 2016), ECF No. 1499.

and the conduct of depositions⁷⁹. The parties also negotiated a complex technology assisted review protocol to govern Volkswagen's document production in the MDL.⁸⁰

5. Other Parties and Claims

The Volkswagen MDL ultimately grew to encompass at least 1,567 individual actions transferred pursuant to 28 U.S.C. § 1407.⁸¹ These actions included a significant number of cases brought by 2.0 liter and 3.0 liter vehicle owners and lessees (both individuals who were still in possession of their vehicle at the time they filed suit, as well as past owners and lessees of the vehicles). The MDL docket also contains many cases brought by Volkswagen franchise dealers as well as competitor dealerships selling new and used vehicles that alleged injury as a result of Volkswagen's deception.⁸² Private plaintiffs also alleged claims against Robert Bosch GmbH and Robert Bosch LLC, companies that had supplied the ECMs, including the integrated software, used in the Volkswagen 2.0 liter and 3.0 liter diesel vehicles.⁸³

Besides the United States, other governmental entities also filed suit in the MDL. The Federal Trade Commission entered the proceeding on March 29, 2016, filing its complaint against Volkswagen Group of America, Inc., asserting that Volkswagen had violated § 5(a) of the Federal Trade Commission Act ("FTC Act"), 15 U.S.C. § 45(a) by unlawfully deceiving consumers in selling or leasing more than 550,000 diesel cars based on false claims that the cars were low-emitting, environmentally friendly, and met emissions standards.⁸⁴ The State of California, though a party to the regulatory proceedings surrounding

⁷⁹ Pretrial Order No. 20, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 12, 2016), ECF No. 1500. The deposition protocol was complex by any standard, including in that it allowed the participation of parties in state court "Clean Diesel" litigation in the MDL depositions. *Id.* at 5.

⁸⁰ Stipulation and Order: Protocol Relating to Use of Technology Assisted Review by the Volkswagen Defendants, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Nov. 7, 2016), ECF No. 2173.

⁸¹ Conditional Transfer Order (CTO-131), In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Apr. 11, 2018), ECF No. 4974.

⁸² *See* Second Amended Consolidated Reseller Dealership Class Action Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Sept. 2, 2016), ECF No. 1805; Second Amended Consolidated Competitor Dealership Class Action Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Sept. 2, 2016), ECF No. 1806.

⁸³ Amended Consolidated Consumer Class Action Complaint at 131-33, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Sept. 2, 2016), ECF No. 1804.

⁸⁴ Complaint, FTC v. Volkswagen, No. 16-cv-1534 (N.D. Cal. Mar. 29, 2016), ECF No. 1.

Volkswagen from the outset by virtue of the Air Resources Board, filed its complaint and formally entered the MDL on June 27, 2016.⁸⁵

In addition to these cases, numerous private plaintiffs also brought securities actions in the MDL alleging that Volkswagen's deception had caused financial injury to certain plaintiffs who held Volkswagen-related securities.⁸⁶ Outside the MDL context, other litigants brought suit in various state courts throughout the country, alleging a host of state law claims.⁸⁷

6. Coordination

Given the number of parties pursuing Volkswagen, the diversity of their claims, and the time frame within which all of the parties were working, there was real potential for chaos. While EPA and CARB had the primary and most significant enforcement responsibility under the CAA, there were many other federal agencies investigating a wide variety of potential claims. As discussed above, the FTC possessed a significant consumer protection claim and had its own administrative process to advance such a claim. Similarly, Customs and Border Protection ("CBP"), part of the Department of Homeland Security, was investigating its own potential claims for customs violations, which also came with its own distinct administrative process. DOJ's Civil Division also pursued a claim under the Financial Institutions Reforms Recovery and Enforcement Act ("FIRREA").⁸⁸ In response, EES began an unprecedented level of coordination inside the federal government, meeting regularly with lawyers from the many stakeholder agencies.

In addition to the wide variety of civil claims being pursued against Volkswagen, DOJ had also launched a criminal investigation. Then-Assistant Attorney General Cruden, who oversaw the Environment and Natural Resource Division's Environmental Crimes Section, coordinated with then-United States Attorney for the Eastern District of Michigan, Barbara McQuade, whose office already had substantial experience in

⁸⁵ Complaint, *California v. Volkswagen AG*, No. 16-cv-03620 (N.D. Cal. June 27, 2016), ECF No. 1.

⁸⁶ See, e.g., Consolidated Securities Class Action Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 16, 2016), ECF No. 1510.

⁸⁷ See, e.g., In re: Volkswagen Clean Diesel Litig., 516 S.W.3d 704 (M.D.L. Panel of Tex. 2016) (consolidating cases under the Texas Clean Air Act, TEX. HEALTH & SAFETY CODE ANN. § 382.001 et seq.); *Salt Lake County v. Volkswagen Group of America, Inc.*, No. 160902546 (Utah 3d. Jud. Dist. Ct. 2016); *Commonwealth v. Volkswagen AG*, No. 16-2266D (Mass. Super. Ct. Suffolk County July 19, 2016).

⁸⁸ Financial Institutions Reform, Recovery, and Enforcement Act of 1989, Pub. L. No. 101-73, 103 Stat. 183 (1989).

automotive cases. It was also located in the same judicial district as both EPA's National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan and Volkswagen's domestic Engineering and Environmental Office in Auburn Hills, Michigan. DOJ's Criminal Division, led by then-Assistant Attorney General Leslie Caldwell also participated in the criminal Volkswagen investigation and prosecution through the Criminal Frauds Section. The three DOJ offices undertook a division of labor, each with its own distinct responsibilities, but the strong relationship among U.S. Attorney McQuade, and AAGs Cruden and Caldwell, ensured a collaborative criminal case involving national and international coordination.⁸⁹

Given the centrality of its civil CAA claims in the MDL, and its ongoing criminal investigation, DOJ also became a central coordination hub for both federal and non-federal cases. DOJ held regular coordination meetings amongst the various federal agencies to facilitate the logistics and information sharing necessary to sustain the simultaneous multi-district litigation, settlement negotiations, and criminal investigation. DOJ also coordinated with many state attorneys general, many of whom were also pursuing consumer claims, environmental claims, or both. Many states filed complaints in state courts, some of which were removed to federal court and sent to the MDL.⁹⁰ The states established their own state-coordinating leadership group to facilitate the implementation of the environmental mitigation trust, discussed *infra* Section III.C.1.b.iv.

III. UNITED STATES V. VOLKSWAGEN – CIVIL ENFORCEMENT

A. Mechanics of Clean Air Act Mobile Source Enforcement

Emissions from mobile sources of pollution—cars, trucks, and other small engines—are regulated under Title II of the CAA, with the aim of protecting human health and the environment and controlling emissions

⁸⁹ While the United States was prosecuting violations of its laws, many foreign governments were also taking action against Volkswagen. Many foreign governments rely on Regulation 83 of the Economic Commission for Europe of the United Nations (“UNECE”), which also prohibits the use of defeat devices or AECDS. Regulation No 83, UNECE, Uniform Provisions Concerning the Approval of Vehicles with Regard to the Emission of Pollutants According to Engine Fuel Requirements, 2015 O.J. (L 172) 1 (EU), [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:42015X0703\(01\)&rid=2](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:42015X0703(01)&rid=2). Countries using the U.N. standard include Japan, Russia, South Africa, Thailand, South Korean, Malaysia, and New Zealand.

⁹⁰ *See, e.g.*, Conditional Transfer Order (CTO-58), In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., MDL No. 2672 (J.P.M.L. Aug. 31, 2016), ECF No. 2003 (transferring suits against Volkswagen by Maryland, Massachusetts, and New York to Judge Breyer to be included in the multi-district litigation).

of harmful air pollutants from mobile sources, such as passenger cars.⁹¹ EPA sets emission limits for different classes of vehicles pursuant to § 202(a) of the Act. Regulations found at 40 C.F.R. Part 86 set emission standards and test procedures for light-duty motor vehicles.

NOx compounds are among the pollutants from mobile sources regulated by EPA. NOx is a family of highly reactive gases that play a major role in the atmospheric reactions of volatile organic compounds that produce ozone in the atmosphere.⁹² Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion.⁹³ Breathing ozone can also worsen bronchitis, emphysema, and asthma, and can lead to premature death.⁹⁴ Children are at greatest risk of experiencing negative health impacts from exposure to ozone.⁹⁵

1. CAA Title II Regulatory Scheme

EPA administers a complex program for the regulation of mobile sources of pollution in the United States. In this section we discuss a few of the aspects of that regulatory program that are relevant to the Volkswagen litigation.

a. Certificates of Conformity

EPA administers a certification program to ensure that every new motor vehicle introduced into United States commerce satisfies applicable emission standards. EPA issues certificates of conformity, or COCs, under this program, which are essentially licenses that permit vehicle manufacturers to sell, offer for sale, introduce or deliver for introduction into United States commerce, or import a new motor vehicle.⁹⁶ A COC is valid for only one production model year.⁹⁷ To obtain a COC from EPA, a manufacturer must submit an application to EPA for each model year and for each test group of vehicles that it intends to enter into United States commerce.⁹⁸ A test group consists of vehicles with

⁹¹ 42 U.S.C. §§ 7521-7590 (2018). Stationary sources, such as power plants, are regulated under Title I. 42 U.S.C. §§ 7401-7515 (2018).

⁹² Complaint, *supra* note 12, at para. 36. *See also* EPA, EPA/600/R-10/076F, INTEGRATED SCIENCE ASSESSMENT FOR OZONE AND RELATED PHOTOCHEMICAL OXIDANTS 1-2 (2013).

⁹³ Complaint, *supra* note 12, at para. 36. *See also* EPA, *supra* note 92, at 8-18.

⁹⁴ Complaint, *supra* note 12, at para. 36. *See also* EPA, *supra* note 92, at 1-6.

⁹⁵ Complaint, *supra* note 12, at para. 36. *See also* EPA, *supra* note 92, at 8-18, 8-19.

⁹⁶ *See How to Obtain a Copy of a Certificate of Conformity for a Light-duty Vehicle (car, truck, or motorcycle)*, EPA (Nov. 7, 2017), <https://www.epa.gov/importing-vehicles-and-engines/how-obtain-copy-certificate-conformity-light-duty-vehicle-car-truck>.

⁹⁷ *Id.*

⁹⁸ 40 C.F.R. § 86.1843-01 (2017).

similar emissions profiles for pollutants regulated under the Act.⁹⁹ For example, EPA test group FVGAV02.0VAL includes the model year 2015 VW Beetle, VW Beetle Convertible, VW Golf, VW Golf Sportwagen, VW Jetta, VW Passat, and Audi A3.¹⁰⁰ Once a manufacturer has submitted a complete and satisfactory COC application, EPA will issue the COC provided the application demonstrates that the vehicle at issue complies with all applicable regulatory and statutory requirements.¹⁰¹ A vehicle is covered by a COC, and thus permitted to be sold in the United States, only if the vehicle is “in all material respects” as described in the manufacturer’s COC application.¹⁰²

Each COC application submitted by a manufacturer must include a list of all AECDs installed on the vehicles.¹⁰³ An AECD is “any element of design which senses temperature, vehicle speed, engine [revolutions per minute], 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.”¹⁰⁴ The regulations define “element of design” to include “any control system (i.e., computer software, electronic control system, emission control system, computer logic), and/or control system calibrations,” in addition to hardware in the vehicle.¹⁰⁵ Modern engines are equipped with electronic control modules or electronic control units (“ECU”) that control functions in the vehicles, including emission controls, using software integrated into the ECU hardware.¹⁰⁶ For each control function (e.g., fuel injection rate), the software includes calibrations or algorithms that process inputs (e.g., engine speed) to the ECU and send a signal to the relevant engine components to perform a certain action.¹⁰⁷ An ECU software calibration that senses inputs and directs the emission control system to operate in a certain way is an AECD within the meaning of the applicable regulations.

Importantly, the Part 86 regulations also require each COC application to include a justification for each AECD and the parameters it senses and controls, including a detailed justification for those that result in reduced effectiveness of the emission control system and a rationale for why it is

⁹⁹ See, e.g., 40 C.F.R. §§ 86.1803-01, 86.1827-01 (2017).

¹⁰⁰ Complaint, *supra* note 12, App. A at 31.

¹⁰¹ 40 C.F.R. § 86.094-22 (2017).

¹⁰² 40 C.F.R. § 86.1848-10(c)(6) (2017); *United States v. Chrysler*, 591 F.2d 958, 960 (D.C. Cir. 1979).

¹⁰³ 40 C.F.R. § 86.1844-01(d)(11) (2017).

¹⁰⁴ 40 C.F.R. § 86.1803-01 (2017).

¹⁰⁵ *Id.*

¹⁰⁶ See Complaint, *supra* note 12, at paras. 45, 68-79.

¹⁰⁷ *Id.*

not a “defeat device,” as defined in the regulations.¹⁰⁸ If a motor vehicle contains an AECD that can reasonably be expected to affect emission controls and that AECD was not disclosed or justified in the COC application, the vehicle does not conform in all material respects with the COC application and is not covered by the COC.

A “defeat device” is an AECD “that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use,” subject to certain exemptions such as those that protect the vehicle against damage or are used only during engine startup.¹⁰⁹ Defeat devices can take the form of vehicle hardware or software, and can be added to the vehicle either prior to sale to the consumer, usually by the manufacturer, or by the consumer as an aftermarket part. At the time a manufacturer submits a COC application to EPA, it must certify that the vehicles covered by the application are free of defeat devices and strategies.¹¹⁰

To obtain a COC, a manufacturer must demonstrate that the subject vehicles’ emission control systems are durable and comply with applicable emission standards for the full useful life of the vehicle, which under current regulations is typically defined as ten years or 120,000 miles, whichever comes first.¹¹¹ To do so, a manufacturer must perform certification and durability testing on a prototype certification vehicle and submit data from that testing to EPA as part of its application.¹¹² This certification testing is conducted in a lab using a dynamometer—essentially a vehicle treadmill. The vehicle is driven over a series of specified drive cycles (speed over time) under particular lab conditions (e.g., ambient temperature, reference fuel) that are intended to simulate real world driving conditions.¹¹³ These drive cycles are collectively referred to as the Federal Test Procedure and are published by EPA in the Code of Federal Regulations.¹¹⁴

b. CARB as Co-Regulator

Section 209(b) of the Act permits California to seek from EPA a waiver of the general state preemption set forth in § 209(a), which provides that no state “shall adopt or attempt to enforce any standard

¹⁰⁸ See 40 C.F.R. § 86.1844-01(d)(11) (2017).

¹⁰⁹ 40 C.F.R. § 86.1803-01 (2017). See also OFFICE OF AIR PROGRAMS, EPA, MSPC ADVISORY CIRCULAR NO. 24, PROHIBITION ON USE OF EMISSION CONTROL DEFEAT DEVICES (Dec. 11, 1972).

¹¹⁰ See 40 C.F.R. § 86.1844-01 (2017).

¹¹¹ See 40 C.F.R. § 86.1805-12 (2017).

¹¹² See, e.g., 40 CFR § 86.1829-01 (2017).

¹¹³ See, e.g., 40 CFR § 1066.801 (2017).

¹¹⁴ See, e.g., *id.*

relating to the control of emissions from new motor vehicles or new motor vehicle engines”¹¹⁵ To obtain a waiver, California must adopt state motor vehicle emission standards that are at least as protective of public health and welfare as the federal standards.¹¹⁶ California currently has a § 209 waiver for new motor vehicles, and the authority to adopt and enforce California’s mobile source emission standards rests with CARB. CARB therefore possesses unique status under the CAA as a co-regulator that sets and enforces its own standards for mobile emission sources.¹¹⁷ CARB uses a vehicle certification process that largely mirrors that used by EPA, issuing Executive Orders (“EO”) in lieu of COCs.¹¹⁸ Because of the dual authority of EPA and CARB, as a practical matter an original equipment manufacturer (“OEM”)¹¹⁹ typically obtains both a COC and an EO to sell a vehicle in the United States.

2. Prior CAA Mobile Source Enforcement

The Environmental Enforcement Section of the U.S. Department of Justice brings civil judicial actions to enforce the CAA pursuant to litigation referrals from EPA. EES frequently pursues mobile source enforcement cases, but often those cases are brought against manufacturers of aftermarket parts, not vehicle manufacturers. Cases alleging that an OEM used a defeat device have historically been less common.

a. Past Enforcement – Heavy Duty Diesel Trucks

Despite the relative rarity of OEM defeat device cases, the United States, in conjunction with California, brought and settled a number of cases against heavy duty diesel truck manufacturers representing ninety-five percent of the domestic heavy duty diesel engine market in the late

¹¹⁵ 42 U.S.C. § 7543(a) (2018).

¹¹⁶ 42 U.S.C. § 7543(b)(1) (2018). Section 177 of the Act allows other states, in turn, to adopt and enforce California’s motor vehicle emission standards for which a waiver has been granted. 42 U.S.C. § 7507 (2018). EPA approval is not required for other states to adopt the California standards under § 177.

¹¹⁷ See 42 U.S.C. § 7543(e)(2).

¹¹⁸ CALIFORNIA AIR RESOURCE BOARD, ON-ROAD NEW VEHICLE & ENGINE CERTIFICATION PROGRAM (updated Mar. 20, 2018), <https://www.arb.ca.gov/msprog/onroad/cert/cert.php#1> (last visited Mar. 21, 2018).

¹¹⁹ 40 C.F.R. § 86.1803-01 (2017) (Defining an OEM as “the manufacturer responsible for the design and production of a vehicle or component. This manufacturer will be fully knowledgeable of any production changes made to the design of the vehicle or component and shall be able to track the individual vehicles or component with regard to such production changes.”).

1990s, for violations of the CAA including defeat device claims.¹²⁰ The violations alleged in the heavy duty diesel cases against Cummins Engines Company, Detroit Diesel Corporation, Mack Trucks, Inc., the Navistar International Transportation Corporation, Caterpillar, Inc., Renault Vehicules Industriels, s.a., and Volvo Truck Corporation looked remarkably similar to those the United States alleged against Volkswagen.¹²¹ In short, the heavy duty diesel trucks at issue in those cases were equipped with software that instructed emission control systems to operate in a manner that met EPA emission standards while undergoing the FTP, but altered operation of the vehicles' emission control systems during normal highway driving which resulted in NOx emissions up to three times the legal level.¹²² The resulting settlements obtained over \$1 billion in relief, including an \$83.4 million civil penalty—then the largest in environmental enforcement history—and \$110 million in measures to mitigate excess NOx emissions caused by the defendants' unlawful conduct.¹²³ The settlements also required the companies to introduce new and cleaner engines, rebuild older engines, recall certain pickup trucks, and conduct new emission testing.¹²⁴ These enforcement actions were well publicized, placing all diesel engine manufacturers on notice of both the law and the United States' vigorous prosecution of defeat device violations.¹²⁵

b. Past Enforcement – Light Duty Vehicles

In addition to the landmark heavy duty diesel cases, the United States, sometimes in conjunction with California, also pursued a number of cases against OEMs for CAA violations related to light duty vehicles, including actions against General Motors Corporation (“GM”), Ford Motor Company (“Ford”), American Honda Motor Co., Inc. (“Honda”), and Hyundai and Kia. In 1995, GM agreed to pay an \$11 million penalty, spend up to \$8.75 million on projects to offset carbon monoxide pollution from 470,000 model year 1991-1995 Cadillacs, and spend more than \$25 million to recall and retrofit the affected vehicles in the first judicially-

¹²⁰ Press Release, EPA, DOJ, EPA Announce One Billion Dollar Settlement with Diesel Engine Industry for Clean Air Violations (Oct. 22, 1998), <https://yosemite.epa.gov/opa/admpress.nsf/b1ab9f485b098972852562e7004dc686/93e9e651adeed6b7852566a60069ad2e>.

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.*

ordered vehicle recall “aimed at curbing damage to the environment.”¹²⁶ The Cadillacs were equipped with software-based defeat devices that overrode emission controls and were not disclosed to EPA, resulting in the sale of vehicles that were not certified by EPA and tripling carbon monoxide emissions from the vehicles.¹²⁷ Less than three years later, the United States and Ford settled claims that Ford installed defeat devices in 60,000 Econoline vans aimed at enhancing fuel economy and resulting in NOx emissions far in excess of the standard during highway driving.¹²⁸ Ford agreed to pay a \$2.5 million civil penalty, spend \$1.3 million to deactivate the defeat device strategy in the vehicles, and spend approximately \$4 million to purchase NOx credits and fund mitigation projects.¹²⁹

On the same day that the Ford settlement was announced, the United States also announced the settlement of claims that Honda disabled the on-board diagnostics system in 1.6 million 1995-1997 model year vehicles, the largest CAA settlement in history to that point.¹³⁰ Honda agreed to pay \$12.6 million in civil penalties and \$4.5 million to implement pollution-reducing projects, as well as provide an extended warranty and other related vehicle remedies at a cost of approximately \$250 million.¹³¹ Finally, in 2014, the United States announced a historic settlement with Hyundai and Kia related to the sale of nearly 1.2 million vehicles that would emit approximately 4.75 million metric tons of excess greenhouse gases as a result of inaccurate statements about fuel economy.¹³² Hyundai and Kia agreed to pay a \$100 million civil penalty, the largest in CAA history at the time, to spend approximately \$50 million

¹²⁶ Press Release, DOJ, U.S. Announces \$45 Million Clean Air Settlement with GM; First Judicial Environmental Recall – 470,000 Cadillacs (Nov. 30, 1995), https://www.justice.gov/archive/opa/pr/Pre_96/November95/596.txt.html.

¹²⁷ *Id.*

¹²⁸ Press Release, DOJ, Ford Motor to Spend \$7.8 Million in Clean Air Act Settlement and Recall 1997 Econoline Vans (June 8, 1998), <https://www.justice.gov/archive/opa/pr/1998/June/265enr.htm.html>. Then-Attorney General Janet Reno remarked that the settlement “sends a message to the automobile industry: You cannot tamper with our environment.” *Id.*

¹²⁹ *Id.*

¹³⁰ Press Release, DOJ, American Honda Agrees to \$267 Million Settlement to Resolve Clean Air Act Violations; Largest Clean Air Act Settlement in History (June 8, 1998), <https://www.justice.gov/archive/opa/pr/1998/June/264enr.htm.html>.

¹³¹ *Id.*

¹³² Press Release, DOJ, United States Reaches Settlement with Hyundai and Kia in a Historic Greenhouse Gas Enforcement Case; Hyundai and Kia to Pay Record \$100 Million Penalty for Selling Vehicles that Emit More Greenhouse Gases than Automakers Certified to EPA (Nov. 31, 2014), <https://www.justice.gov/opa/pr/united-states-reaches-settlement-hyundai-and-kia-historic-greenhouse-gas-enforcement-case>.

on injunctive measures to prevent future violations, and to forfeit more than \$200 million in greenhouse gas emission credits.¹³³

B. The United States' Civil Clean Air Act Case

In this section, we discuss the specific CAA claims the United States filed against Volkswagen and Volkswagen's responsive filings.

*1. The United States' CAA Claims*¹³⁴

The United States' complaint alleged four claims against Volkswagen under § 203 of the CAA, 42 U.S.C. § 7522.¹³⁵ A civil penalty of \$37,500 per day or per violation, adding up to statutory maximum penalties in the tens of billions of dollars, attached to each of the United States' claims against Volkswagen. In its prayer for relief, the United States sought civil penalties and injunctive relief for the violations.

a. Sale of Vehicles Not Covered by Certificates of Conformity

The United States first alleged that Volkswagen¹³⁶ sold nearly 600,000 new model year 2009-2016 2.0 liter and 3.0 liter motor vehicles in the United States that were not covered by a COC because those vehicles did not conform in all material respects to the design specifications described in the applications for the COCs that purportedly cover them, in violation of § 203(a)(1).¹³⁷ Among other things, those vehicles were equipped with undisclosed AECs that affect emission controls. Specifically, the COC applications described vehicle design specifications that were in compliance with applicable regulations, including design specifications for the emission engine control systems and after-treatment systems. Certain software functions and calibrations included in the ECU of the production vehicles ultimately sold in the United States operated the emission controls in the manner described in the COC applications. But other software functions and calibrations that affected emission controls

¹³³ *Id.*

¹³⁴ The United States filed its initial Complaint on January 4, 2016, and an Amended Complaint on October 7, 2016. This section discusses the United States' allegations in its Amended Complaint, some but not all of which were admitted to by the Volkswagen, Audi, and Porsche defendants in the responsive pleadings discussed briefly in Section B.2., *infra*. The Amended Complaint also alleged further facts, arguably mooted Porsche's motion to dismiss, discussed in Section B.2., *infra*. United States' Amended Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 7, 2016), ECF No. Dkt. 2009 [hereinafter Amended Complaint].

¹³⁵ *Id.*

¹³⁶ In this section, we refer to Volkswagen generally, but not all claims were alleged against each of the six Volkswagen defendants. See Amended Complaint, *supra* note 134.

¹³⁷ Amended Complaint, *supra* note 134, at paras. 177-181.

in the production vehicles were not described in the relevant COC application.¹³⁸ In short, Volkswagen did not build and sell the vehicles described in the COCs issued by EPA and was subject to civil penalties of up to \$37,500 per vehicle for each such violation.

b. Manufacture, Sale or Installation of a Defeat Device

The complaint alleged that certain of the undisclosed AECs in the subject vehicles included parts or components installed in the cars, a principal effect of which is to bypass, defeat, or render inoperative an element of design that was installed in the vehicle in compliance with Title II regulations. Knowingly installing or selling defeat devices, or if the defendant should know about the installation or sale, is a violation of § 203(a)(3)(b).¹³⁹ This prohibition is generally referred to as the prohibition of defeat devices.¹⁴⁰ EPA does not certify vehicles that it knows are equipped with defeat devices.

The ECUs in the 2.0 liter subject vehicles contain software functions and calibrations that sense when the vehicle is undergoing FTP-prescribed emission testing, by sensing various inputs including vehicle speed, engine operating time, steering wheel angle, and barometric pressure. In fact, the inputs being monitored by the vehicles' ECUs very precisely tracked the parameters of the FTP.¹⁴¹ As a result, during vehicle testing the software told the engine to operate in such a way as to produce compliant emission results ("dyno mode"), but at all other times during normal vehicle operation, the software instructed the vehicle to run a separate "road mode" that reduced or turned off emission controls. This dual-mode strategy was hidden in a software function that Volkswagen referred to as the "Akustikfunktion," among other aliases, and was not disclosed in the COC application.¹⁴² Operation in "road mode" resulted in NOx emissions at levels up to forty times higher than applicable emission limits.¹⁴³

The 3.0 liter vehicles included similar, but different, dual-mode strategies, including a "temperature conditioning mode," that caused the emission controls to underperform or fail to perform during normal vehicle operation (known as "normal mode"), which resulted in NOx

¹³⁸ See Section III.A.1.a., *infra*.

¹³⁹ 42 U.S.C. § 7522 (a)(3)(B) (2018).

¹⁴⁰ See, e.g., 40 CFR 86.1809-10 (2017).

¹⁴¹ Volkswagen refined these inputs over time, thereby "improving" the defeat devices. See Amended Complaint, *supra* note 134, at paras. 115, 116, 194, 195.

¹⁴² *Id.* at para. 111.

¹⁴³ *Id.* at para. 90.

emissions up to nine times the applicable limit.¹⁴⁴ The United States sought civil penalties of up to \$3,750 per part or component that constitutes a “defeat device” per each vehicle at issue.

c. Tampering

The United States also alleged that certain of the undisclosed AECDS in the vehicles—specifically the “road mode” AECDS in the 2.0 liter vehicles and the “normal mode” AECDS in the 3.0 liter vehicles—have the effect of removing or rendering inoperative devices or elements of design installed in the vehicles in compliance with Title II regulations.¹⁴⁵ In other words, by incorporating the “road mode” and “normal mode” AECDS in the 2.0 liter and 3.0 liter vehicles, respectively, Volkswagen tampered with properly installed emission controls in violation of § 203(a)(3)(a). Volkswagen further tampered with the properly installed emission control system in the 2.0 liter vehicles when it knowingly installed software functions and calibrations as part of a 2014 “field fix” that removed or rendered inoperative engine and after-treatment control systems after those vehicles had already been sold to a consumer.¹⁴⁶ This field fix included the addition of a steering wheel angle input, another input that would allow the vehicle to recognize when it was undergoing emission testing.¹⁴⁷ Essentially, Volkswagen refined the functioning of the illicit software after the vehicles were sold to consumers, further tailoring the Akustikfunktion so that the vehicle spent less time in “dyno mode” (i.e., emission compliant mode). The Complaint sought up to \$37,500 in civil penalties per tampering violation per vehicle.

d. Failure to Report Information Reasonably Required by the EPA Administrator

Finally, the United States claimed that Volkswagen failed to disclose certain information in its COC applications, in part by failing to disclose certain AECDS or failing to justify why such AECDS are not defeat devices. Each failure to provide such information required by the EPA Administrator is a violation of § 203(a)(2), and is subject to civil penalties of up to \$37,500 per violation per vehicle.¹⁴⁸

¹⁴⁴ *Id.* at para. 103.

¹⁴⁵ *Id.* at paras. 188-199.

¹⁴⁶ *Id.* at paras. 195-196.

¹⁴⁷ *Id.* at para. 115.

¹⁴⁸ 42 U.S.C. § 7524(a) (2018).

2. Defendants' Responsive Filings

Both the Volkswagen/Audi defendants and the Porsche defendants initially filed partial motions to dismiss the United States' complaint, on May 16, 2016.¹⁴⁹ Volkswagen/Audi's motion to dismiss certain of the United States' claims asserted generally that (1) the United States had not sufficiently pled knowledge as to each Volkswagen defendant with respect to the 3.0 liter vehicles; and (2) the COC claim was inconsistent with certain aspects of the defeat device and tampering claims.¹⁵⁰ Porsche's motion alleged that the United States had not pled its tampering claim as to the Porsche defendants with sufficient particularity, arguing that because the claim was based on averments of fraud, or at least sounded in fraud, the United States' tampering claim was subject to the heightened pleading standard set forth in Federal Rule of Civil Procedure 9(b).¹⁵¹ Volkswagen/Audi withdrew its motion shortly thereafter, on May 24, 2016,¹⁵² and filed an answer to the United States' January 4, 2016 complaint that same day, admitting a number of elements of the United States' claims.¹⁵³ The United States filed an Opposition to Porsche's motion to dismiss on October 7, 2016,¹⁵⁴ along with its amended complaint.¹⁵⁵ In its Opposition, the United States argued (1) that Ninth

¹⁴⁹ The Volkswagen Defendants' Notice of Motion and Motion to Dismiss the United States' Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 16, 2016), ECF No. 1508; Defendants Porsche Cars North America, Inc.'s and Dr. Ing. h.c. F. Porsche AG's Partial Motion to Dismiss, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 16, 2016), ECF No. 1512.

¹⁵⁰ The Volkswagen Defendants' Notice of Motion and Motion to Dismiss The United States' Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 16, 2016), ECF No. 1508.

¹⁵¹ Defendants Porsche Cars North America, Inc.'s and Dr. Ing. h.c. F. Porsche AG's Partial Motion to Dismiss, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 16, 2016), ECF No. 1512.

¹⁵² Volkswagen Defendants' Notice of Withdrawal of Motion to Dismiss the United States' Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 24, 2016), ECF No. 1536.

¹⁵³ Answer to United States' Complaint by Defendants Volkswagen AG, Audi AG, Volkswagen Group of America, INC., and Volkswagen Group of America Chattanooga Operations, LLC., In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 24, 2016), ECF No. 1537.

¹⁵⁴ United States' Opposition to Defendants Porsche Cars North America, Inc.'s and Dr. Ing. h.c. F. Porsche AG's Partial Motion to Dismiss, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 7, 2016), ECF No. 2010.

¹⁵⁵ Amended Complaint, *supra* note 134. After the United States and Porsche resolved all of the United States' allegations via the settlements discussed in Section C.2., *infra*, the Court denied Porsche's motion to dismiss as moot. Order Denying Porsche Cars North America, Inc. and Porsche AG's partial motion to Dismiss, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Sept. 20, 2017), ECF No. 3882.

Circuit precedent established that the United States' amended complaint superseded and rendered moot Porsche's motion to dismiss; and (2) that the tampering claim was not subject to a heightened pleading standard because it does not include fraud as an essential element, is not grounded in fraud, and does not rely on any averments of fraud.¹⁵⁶ Each of the defendants answered the United States' Amended Complaint on December 9, 2016.¹⁵⁷

C. Resolving Civil Claims Against Volkswagen: Cars on the Road Were The United States' Enforcement Priority

Many different types of legal claims brought by many different plaintiffs were consolidated before Judge Breyer. The claims included consumer false advertising and deceptive trade practice claims, RICO claims,¹⁵⁸ lost profit claims, and the United States' CAA claims. The various plaintiffs pursuing claims included affected car owners, owners of Volkswagen dealerships, the Federal Trade Commission, state attorneys general, and, of course, the United States. Judge Breyer made clear to the many claimants from the outset, before he had even selected class counsel to represent the private litigants, that the court's highest priority was to address the ongoing excess emissions from the cars on the road:

THE COURT: . . . it is essential that we all look to the larger purpose here rather than the individual purpose . . . [w]e have out there 575,000 or more vehicles that are in violation of environmental standards . . . this is a problem. It's a problem for the environment.¹⁵⁹

¹⁵⁶ United States' Opposition to Defendants Porsche Cars North America, Inc.'s and Dr. Ing. h.c. F. Porsche AG's Partial Motion to Dismiss at 2, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 7, 2016), ECF No. 2010.

¹⁵⁷ Defendant Porsche Cars North America, Inc.'s Answer to the United States of America's Amended Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Dec. 9, 2016), ECF No. 2464; Defendant Dr. Ing. h.c. F. Porsche Ag's Answer to the United States of America's Amended Complaint, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Dec. 9, 2016), ECF No. 2465; Answer to United States' Amended Complaint by Defendants Volkswagen AG, Audi AG, Volkswagen Group of America, Inc., and Volkswagen Group of America Chattanooga Operations, LLC, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Dec. 9, 2016), ECF No. 2471.

¹⁵⁸ Racketeer Influenced and Corrupt Organizations Act, 18 U.S.C. §§ 1961-68 (2018).

¹⁵⁹ Transcript of Case Management Conference at 31, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 29, 2016), ECF No. 1119 (The Case Management Conference was held to select private plaintiff's Lead Counsel and a Plaintiff's Steering Committee to manage the class action suits).

At the conclusion of the hearing, Judge Breyer reminded all counsel seeking appointment to represent consumer interests in the Volkswagen MDL, that “this MDL is not like every other MDL case,” re-emphasizing “to everyone in the room, that [he was] deeply concerned about vehicles being on the road which are polluting.”¹⁶⁰ The court’s priorities aligned with those of DOJ, EPA, and CARB. Accordingly, the United States and California immediately engaged Volkswagen in substantive settlement discussions that focused on addressing their regulatory and judicial priority in the case, the cars on the road. In this section, we discuss the settlements entered into between DOJ, EPA, and CARB, and Volkswagen.

1. The Cars on the Road – 2.0 Liter Settlements

Approximately 480,000 of the 580,000 total subject vehicles were 2.0 liter vehicles. After initial negotiations, Volkswagen conceded it could not reasonably modify the 2.0 liter vehicles to meet the emission standards to which the vehicles were originally certified.¹⁶¹ Volkswagen was still doing testing and engineering work on the 3.0 liter vehicles, and had not conceded that the vehicles could not be fixed to the certified standard. Accordingly, the 3.0 liter vehicles, a civil penalty and additional injunctive relief were reserved, and the United States and California set out with Volkswagen to craft an appropriate settlement addressing the 2.0 liter vehicles. Because the 2.0 liter vehicles were emitting illegal quantities of NO_x, any solution to the litigation would mean not only addressing the violating vehicles, but also fully mitigating the total, lifetime excess NO_x illegally emitted into the atmosphere.

a. Agreement in Principle

Judge Breyer set an aggressive schedule to determine if the parties could quickly reach some kind of resolution addressing the cars on the road, holding monthly status conferences to receive in-person updates from counsel about the progress, between which the Settlement Master engaged all of the parties in intense settlement discussions. At the February 25, 2016 hearing, the judge reminded the parties that “600,000 vehicles are on the road today, out of compliance with . . . standards . . . So it’s an ongoing harm that has to be addressed. And that gives a sense

¹⁶⁰ *Id.* at 214.

¹⁶¹ *See, e.g.*, Transcript of Proceedings at 12, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Aug. 25, 2016), ECF No. 1775.

of urgency.”¹⁶² At the March 24, 2016 status conference, the Court raised, once again, “the most important matter in front of [the parties], which is the status of vehicle remediation.”¹⁶³ The Settlement Master reported that “substantial progress” had been made, and the judge set a deadline of April 21, 2016, for the parties “to announce a concrete proposal for getting the polluting vehicles off the road.”¹⁶⁴

The Department of Justice hosted intense settlement negotiations that included senior officials from EPA and CARB, as well as senior members of Volkswagen management and their counsel. By the time they appeared at the April 21, 2016 status conference, the United States and California had reached an agreement in principle with Volkswagen addressing the 2.0 liter vehicles. Judge Breyer announced that the agreement would provide consumers with the option to have Volkswagen buy back the vehicles, cancel leases, and, subject to government approval, an option to modify the vehicles to reduce emissions.¹⁶⁵ He also announced that the Plaintiff’s Steering Committee (“PSC”) had reached an agreement in principle, providing “substantial compensation” to class members in connection with the program described in the government’s agreement.¹⁶⁶ The agreements in principle outlined the general framework of a settlement, but there were many details that remained to be worked out. Judge Breyer set a deadline of June 21, 2016 for the United States to file a consent decree memorializing the terms of the agreement in principle with Volkswagen, giving the parties a mere 60 days.¹⁶⁷ The Settlement Master continued hosting the parties on a dedicated floor of the building at his law office in Washington, DC, where they engaged in settlement negotiations at all hours, day after day.

¹⁶² Transcript of Proceedings at 13, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Feb. 25, 2016), ECF No. 1270.

¹⁶³ Transcript of Proceedings at 4, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Mar. 24, 2016), ECF No. 1384.

¹⁶⁴ *Id.* at 5, 7.

¹⁶⁵ Transcript of Proceedings at 5, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. April 21, 2016), ECF No. 1439.

¹⁶⁶ *Id.* at 6.

¹⁶⁷ *Id.* at 9-10. The next day, Judge Breyer entered a gag order rendering the agreements in principle, and all drafts of all term sheets, appendices, release agreements, consent decrees, and communications regarding the resolution as confidential. Stipulation and Order Regarding Confidentiality of Settlement Documents and Discussions, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. April 22, 2016), ECF No. 1444.

b. The 2.0 Liter Consent Decree

On June 28, 2016, less than six months after filing its original complaint,¹⁶⁸ the United States lodged the 225-page long 2.0 Liter Consent Decree with the court, partially resolving its CAA claims for injunctive relief with respect to the approximately 480,000 vehicles equipped with 2.0 liter engines.¹⁶⁹ The Decree also partially resolved the 2.0 liter vehicle claims for injunctive relief asserted by California under its environmental and unfair competition laws.¹⁷⁰ Then-Deputy Attorney General Sally Yates, while noting that “Volkswagen turned nearly half a million American drivers into unwitting accomplices in an unprecedented assault on our environment,” announced the Consent Decree, stating, “[t]his partial settlement marks a significant first step towards holding Volkswagen accountable for what was a breach of its legal duties and a breach of the public’s trust.”¹⁷¹

The Decree required the Volkswagen Defendants¹⁷² to achieve a recall of at least eighty-five percent of the affected 2.0 liter vehicles by June 30, 2019 (both nationally and in California), either by removing the vehicles from the roads of the United States through a buyback program, or modifying them in accordance with the terms of the Decree.¹⁷³ The choice between a buyback or an approved modification was entirely up to the affected owner or lessee. In addition, Volkswagen was required to fund a

¹⁶⁸ The Court granted the parties a one week-extension from the June 21 deadline. Order Extending Deadline to File Settlement Agreements and Consent Decrees, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. June 15, 2016), ECF No. 1572.

¹⁶⁹ Notice of Lodging of Partial Consent Decree, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. June 28, 2016), ECF No. 1605. The Consent Decree was subsequently entered by the Court on October 25, 2016. Order Granting the United States’ Motion for Entry of Partial Consent Decree In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 25, 2016), ECF No. 2103 [hereinafter 2.0 L Consent Decree].

¹⁷⁰ *Id.* at 1-2.

¹⁷¹ Press Release, DOJ, Volkswagen to Spend Up to \$14.7 Billion to Settle Allegations of Cheating Emissions Tests and Deceiving Customers on 2.0 Liter Diesel Vehicles (June 28, 2016), <https://www.justice.gov/opa/pr/volkswagen-spend-147-billion-settle-allegations-cheating-emissions-tests-and-deceiving>. Simultaneously with filing the Consent Decree, the PSC filed a Consumer Class Action Settlement Agreement and the FTC filed a Partial Stipulated Order. Consumer Class Action Settlement Agreement and Release, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. June 28, 2016), ECF No. 1606. Partial Stipulated Order for Permanent Injunction and Monetary Judgment, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. June 28, 2016), ECF No. 1607.

¹⁷² The Porsche Defendants, Dr. Ing. h.c. F. Porsche AG and Porsche Cars North America, Inc., while named in the United States’ Complaint, were not among the settling defendants because none of the 2.0 liter vehicles were Porsche models.

¹⁷³ 2.0 L Consent Decree, *supra* note 169, at Apps. A and B.

\$2.7 billion environmental mitigation trust and to invest \$2 billion in zero emission vehicle (“ZEV”) infrastructure, access, and education.¹⁷⁴ The total estimated value of the settlement was \$14.7 billion. The key terms are described below.

i. Appendix A – Buyback and Lease Termination

To accomplish this recall, Volkswagen is required to offer every owner and lessee of an “eligible” 2.0 liter vehicle (basically any vehicle covered by the claims in the United States’ Complaint and still operable) a buyback for fair compensation or a lease termination at no cost.¹⁷⁵

The Decree required Volkswagen to offer a buyback at no less than the cost of the retail purchase of a comparable replacement vehicle of similar value, condition and mileage as of September 17, 2015 (the day before EPA issued the 2.0 Liter NOV and the scandal was made public). Under the terms of the Decree, this standard was defined as the “Retail Replacement Value” of the vehicle.¹⁷⁶ An offer of at least Retail Replacement Value ensured car owners would receive a fair price for their vehicle, which should result in a high recall participation rate.

By using a vehicle buyback to accomplish a regulatory recall, the Consent Decree’s required CAA remedy also created the foundation for a desirable consumer remedy. The 2.0 Liter Consent Decree explicitly provided that Volkswagen could satisfy the recall buyback obligation by offering payments to consumers through settlements with the PSC and the FTC, provided the payments were at least equal to the Retail Replacement Value defined by the 2.0 Liter Consent Decree.¹⁷⁷ Even if the Class Action Settlement or FTC Order were not approved, Volkswagen’s obligation to offer the buyback under the terms set forth in Appendix A was independently enforceable.¹⁷⁸ Because the PSC and FTC sought consumer damages in addition to the value of the vehicle, Volkswagen’s compliance with those settlements necessarily meant that Volkswagen’s consumer payments under the buyback program would meet or exceed Retail Replacement Value, and would ultimately satisfy EPA and CARB’s requirements to conduct a recall buyback program.¹⁷⁹

¹⁷⁴ *Id.* at Apps. C and D.

¹⁷⁵ *Id.* at App. A, para. 2.7. An “eligible owner” is someone in possession of an eligible vehicle who has the title or the ability to convey the title.

¹⁷⁶ *Id.* at para. 2.13.

¹⁷⁷ *Id.* at para. 4.1. Ultimately, the Class Action Settlement made the buyback remedy available to any eligible class member that did not opt out of the class. The buyback remedy under the FTC Order was also only available to class members that did not opt out.

¹⁷⁸ *Id.*

¹⁷⁹ The buyback valuation methodology in the Class Action Settlement resulted in payments to consumers that are “equal to a minimum of 112.6% of the subject vehicles’ retail values as of

Buyback compensation under the Class Action Settlement ranges from approximately \$12,500 ('09 Jetta) up to \$40,500 ('15 Audi A3), which includes both compensation for the value of the car and consumer damages.¹⁸⁰ Eligible lessees are also entitled to consumer damages under the Class Action Settlement and FTC Order.¹⁸¹ Volkswagen was required to begin the buyback and lease termination program within fifteen days of entry of the Consent Decree and to keep the program open for two years.¹⁸² The total cost to Volkswagen of offering to buy back or terminate active leases for every operable eligible 2.0 liter vehicle was projected to be up to \$10.033 billion.¹⁸³

ii. Appendix B – Emissions Modification Recall

In addition to the buyback recall, the Consent Decree provides Volkswagen the option to pursue a more traditional automobile recall by submitting proposals for modifying particular subsets of vehicles. The modifications, if approved, would improve emissions performance in accordance with vehicle performance and design requirements set forth in the Decree.¹⁸⁴ If a proposal is approved by EPA and CARB, Volkswagen must offer owners and lessees the option of the emissions modification.¹⁸⁵ This Emissions Modification Recall Program is set forth in Appendix B to the Consent Decree, outlining the technical requirements that Volkswagen must meet to receive approval from EPA and CARB in order to offer an emissions modification to affected vehicle owners and lessees.¹⁸⁶

Appendix B is a long and technical document that sets forth the emission limits the vehicles must meet, the onboard diagnostic (“OBD”) system requirements, the application process and all of the information

September 2015.” Plaintiffs’ Notice of Motion, Motion, and Memorandum in Support of Final Approval of the 2.0-Liter TDI Settlement Consumer and Reseller Class Action Settlement, Exhibit A, Declaration of Edward M. Stockton at 15, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Aug. 26, 2016), ECF No. 1784.

¹⁸⁰ Consumer Class Action Settlement Agreement and Release (Amended), Exhibit 6 Estimated Settlement Payments to Owners and Lessees at 1-3, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. July 26, 2016), ECF No. 1685 [hereinafter Class Action Settlement].

¹⁸¹ *Id.* at 4; Partial Stipulated Order for Permanent Injunction and Monetary Judgment at 5-6, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. June 26, 2016), ECF No. 1607 [hereinafter FTC 2.0 L Order].

¹⁸² 2.0 L Consent Decree, *supra* note 169, at App. A para 4.3.

¹⁸³ 2.0 L Consent Decree, *supra* note 169, at 4; Class Action Settlement, *supra* note 180; FTC 2.0 L Order, *supra* note 181, at 13.

¹⁸⁴ 2.0 L Consent Decree, *supra* note 169, at App. B.

¹⁸⁵ *Id.* at para. 5.1.1.

¹⁸⁶ *Id.*

that Volkswagen must submit, the submissions deadlines, the warranties and disclosures about the cars that Volkswagen will be required to make and provide, and how EPA and CARB will monitor compliance and enforce noncompliance.¹⁸⁷ All defeat devices must be removed from the vehicles as part of the emissions modification.¹⁸⁸ Any emissions modification approved by EPA and CARB requires extensive testing by Volkswagen (both before and after the submission of any proposal) and may include both software changes and new hardware to be installed in the vehicles. A given modification, if approved, would substantially reduce NOx emissions from the vehicles, but would not bring the vehicles into compliance with either the emission limits or the OBD system requirements to which the vehicles were originally certified.¹⁸⁹ EPA's decision to allow this less-than-fully-compliant approach to reducing vehicle emissions recognized the reality of the engineering limitations and the urgency to address the violations by carefully balancing these factors against "the adverse environmental consequences that would result from scrapping nearly half a million cars," as well as "the substantial environmental remediation components of the settlement as a whole," which achieved a significant reduction in emissions.¹⁹⁰

Due to the highly technical nature of an emissions modification, and its relationship to the buyback as an alternate consumer choice, the Consent Decree required Volkswagen to provide car owners with a disclosure that required approval by EPA and CARB.¹⁹¹ Any such disclosure must contain a clear and accurate description regarding all impacts of the emissions modification on the vehicle, including emissions levels as compared with the limits to which the vehicles were originally certified, and any impacts on fuel economy or vehicle maintenance.¹⁹² Volkswagen is also required to provide an extended warranty covering the emissions control system and engine long block for any modified vehicle.¹⁹³

¹⁸⁷ *Id.* at Section III.

¹⁸⁸ *Id.* at para. 3.1.3.

¹⁸⁹ EPA and CARB estimate that an emissions modification will reduce NOx emissions from the vast majority of vehicles by approximately eighty to ninety percent compared to their original condition. *Volkswagen Clean Air Act Civil Settlement*, EPA (Oct. 3, 2017), <https://www.epa.gov/enforcement/volkswagen-clean-air-act-partial-settlement>.

¹⁹⁰ United States' Notice of Motion, Motion and Memorandum in Support of Entry of Partial Consent Decree in *United States of America v. Volkswagen AG, et al.*, No. 2:16-cv-10006 (E.D. Mich. 2016) at 14-15, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Sept. 30, 2016), ECF No.1973 [hereinafter 2.0 L MTE].

¹⁹¹ 2.0 L Consent Decree, *supra* note 169, at App. A, paras. 3.1-3.3.

¹⁹² *Id.* at para. 3.2, App. B para. 4.3.8.

¹⁹³ *Id.* at App. B, para. 3.9.

The Consent Decree set aggressive deadlines that Volkswagen is required to meet in order to complete the required testing and submit an application for an approved emissions modification. The availability of such a modification to consumers is not guaranteed, but is subject to Volkswagen's submittals meeting the demanding requirements of Appendix B to the Consent Decree. Volkswagen is required to make any approved modification available to all affected vehicle owners and lessees, free of charge and in perpetuity.¹⁹⁴ This means that an approved emissions modification recall will always be available to any affected car owner, regardless of when he or she obtained the vehicle or elects to receive the modification, and regardless of whether the affected car owner is a member of any private class action settlement, i.e., individuals that opt out of the consumer class settlement.

An approved emissions modification also serves as a limitation on Volkswagen's ability to export, sell, or lease any affected vehicle. The Consent Decree prohibited Volkswagen from exporting, selling, or leasing a vehicle unless and until it has received an approved emissions modification.¹⁹⁵ In the event that no modification was approved for a given subset of vehicles, Volkswagen is prohibited from selling, leasing, or exporting those vehicles entirely. Volkswagen is required to achieve an eighty-five percent recall rate through a combination of the buyback and lease termination program in Appendix A, and the emissions modifications in Appendix B. If Volkswagen fails to meet this recall rate, it must make additional payments into the mitigation trust fund, as discussed below.¹⁹⁶

Appendix B was a recognition of the engineering limitations Volkswagen faced—that it could not achieve a fully-compliant “fix” that brings the vehicles to their certified standard and has no detrimental impacts on vehicle performance within a realistic timeframe, if ever. The Emissions Modification Recall provides car owners with the ability to keep and continue driving their cars, while improving the emissions consequence of doing so, and providing an environmentally beneficial alternative to scrapping nearly half a million noncompliant cars.

iii. Appendix C – Zero Emission Vehicle Investment Commitment

In addition to the recall measures, the Consent Decree also requires Volkswagen to invest \$2 billion to promote the use of zero emission

¹⁹⁴ *Id.* at App. A, paras. 5.1-5.2.

¹⁹⁵ *Id.* at para. 7.2.

¹⁹⁶ *Id.* at paras. 6.1, 6.3.

vehicles (“ZEVs”) and ZEV technology.¹⁹⁷ Appendix C, entitled “The ZEV Investment Commitment,” requires Volkswagen make the investment over a 10-year period. Appendix C committed Volkswagen to two separate planning processes: one governing \$1.2 billion in nationwide ZEV investments, excluding California (the national plan); and the other governing ZEV investments totaling \$800 million that will be implemented in the State of California (the California plan).¹⁹⁸ For each of the respective plans, EPA (for the national plan) and CARB (for the California plan) monitors Volkswagen’s compliance with the applicable Consent Decree terms. Volkswagen’s National and California ZEV investment plans were subject to EPA and CARB approval, respectively.

In connection with the national investment plan, Appendix C permitted Volkswagen to make three types of investments: installing and maintaining electric vehicle charging infrastructure, programs or actions to increase public exposure and access to ZEVs, and brand-neutral education and public outreach.¹⁹⁹ Also in connection with the national plan, Volkswagen must develop a national outreach plan to inform and seek input from State, local, and Tribal governments, and federal agencies about its proposed investments.²⁰⁰

In order to determine which investment costs could properly be credited against the \$2 billion obligation, Volkswagen was required to prepare a Creditable Cost Guidance in accordance with the definitions and cost principles set forth in Consent Decree Attachment C-1, subject to EPA approval.²⁰¹ Volkswagen was further required to retain a certified public accountant, subject to the United States’ approval, to review and attest to the accuracy and consistency of the costs with the Creditable Cost Guidance before the claimed costs would be credited against the total obligation.²⁰² As a transparency measure, Volkswagen is required to submit annual reports of the investments to EPA and CARB, and post the

¹⁹⁷ Press Release, *supra* note 171 (noting that the ZEV Investment “is intended to address the adverse environmental impacts from consumer’ purchases of the 2.0 liter vehicles, which the governments contend were purchased under the mistaken belief that they were lower emitting vehicles.”).

¹⁹⁸ 2.0 L Consent Decree, *supra* note 169, at App. C.

¹⁹⁹ *Id.* at para. 2.1. The California plan contains similar requirements for a defined list of allowable investments and ensures that the California investments are developed and implemented with appropriate input from CARB. The California plan also allows for development of investments relating to heavy duty ZEV charging infrastructure, vehicle scrap and replace programs, and the development of a California “Green City” initiative. *Id.* at paras. 1.10, 3.1.

²⁰⁰ *Id.* at para. 2.3.

²⁰¹ *Id.* at para. 2.2. A separate California Creditable Cost Guidance was subject to CARB approval. *Id.* at para. 3.2.

²⁰² *Id.* at para. 2.7.

non-confidential portions on a public website. The annual reports will detail the progress of the ZEV projects and include Volkswagen's costs for which they are seeking credit against the total obligation.²⁰³

iv. Appendix D – Environmental Mitigation Trust

Finally, the Consent Decree requires Volkswagen to fund an environmental mitigation trust for the benefit of States and federally-recognized Indian tribes with three annual payments of \$900 million, for a total amount of \$2.7 billion.²⁰⁴ The trust was designed to fully mitigate the total, lifetime excess NOx emissions from the 2.0 liter engines.

The funds will be used for projects that reduce (or “mitigate”) NOx—the major excess pollutant from these vehicles and a significant public health concern—in order to address past and future excess emissions from these vehicles. All fifty states, Puerto Rico, the District of Columbia, and Indian tribes are eligible to become beneficiaries.²⁰⁵ “Beneficiaries can select from a list of approved mitigation projects that are cost effective and have a nexus to the excess NOx emissions caused by the violations,” including replacement or retrofit of eligible diesel vehicles with cleaner technology.²⁰⁶ Actions may also include, subject to certain limitations, electric-charging infrastructure for light duty zero emission passenger vehicles.²⁰⁷ Beneficiaries have the flexibility to choose which projects on the list of eligible mitigation actions are the best options for their jurisdictions.

Appendix D includes an initial allocation of funds among all potential beneficiaries, which will be adjusted by the Trustee based on the number of beneficiaries that participate in the program.²⁰⁸ The allocation is based primarily on the number of 2.0 liter vehicles registered in each

²⁰³ *Id.* at paras. 2.9, 3.6.

²⁰⁴ 2.0 L Consent Decree, *supra* note 169, at para. 14.

²⁰⁵ *Id.* at App. D-1.

²⁰⁶ *See* 2.0 L MTE, *supra* note 190, at 18. Eligible mitigation actions can include projects to reduce NOx from heavy duty diesel sources near population centers, such as large trucks that make deliveries and service ports, school and transit buses, and freight switching railroad locomotives. 2.0 L Consent Decree, *supra* note 169, at App. D-2.

²⁰⁷ 2.0 L Consent Decree, *supra* note 169, at App. D-2, para. 9.

²⁰⁸ *Id.* at App. D-1. *See also id.* at App. D para. 5.0. On January 29, 2018, the Trustee notified the Court that all fifty states, the District of Columbia, Puerto Rico and twenty-nine federally recognized Indian Tribes had been designated beneficiaries. *See* Notice of Beneficiary Designation Under the Volkswagen Diesel Emissions Environmental Mitigation Trust for State Beneficiaries, Puerto Rico, and the District of Columbia, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 29, 2018), ECF No. 4700; Notice of Beneficiary Designation Under the Volkswagen Diesel Emissions Environmental Mitigation Trust for Indian Tribe Beneficiaries, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 29, 2018), ECF No. 4701.

jurisdiction, with a minimum funding allocation of \$7.5 million for each beneficiary. The Trust Agreement provides for transparency of funding requests and financial reporting by the Trustee and the beneficiaries, and ongoing jurisdiction of the court for disputes.²⁰⁹

As noted above, if Volkswagen fails to achieve a recall rate of eighty-five percent by June 30, 2019 between both the buyback and any emissions modification, it must augment the mitigation fund by \$85 million for each percentage point that it falls short of the mandated goal.²¹⁰ EPA expects that the amount that Volkswagen is required to initially contribute to the trust fund will be enough to fund projects to fully mitigate the total, lifetime excess emissions from the 2.0 liter vehicles.

The form of the Trust was set forth in Appendix D, though the operative Trust Agreement would not be finalized until a Trustee was formally selected.²¹¹ On September 19, 2017, the court approved two Trust Agreements, one for State Beneficiaries, and one for Indian Tribe Beneficiaries.²¹² On October 2, 2017, the trust agreements became effective when the United States filed the fully executed trust agreements with the court.²¹³

v. Unique Legal Provisions

In addition to the relief set forth in Appendices A through D, the main body of the 2.0 Liter Consent Decree contains the remaining legal provisions that fully memorialize the settlement.²¹⁴ Many of the legal provisions would be considered standard in a consent decree. Provisions discussing jurisdiction, modification and termination of the decree, dispute resolution, what constitutes a force majeure event, and even stipulated penalty provisions for non-compliance with the settlement's terms qualify as standard fare. But the Volkswagen matter was a unique case, and fittingly, the Consent Decree contained some unique and noteworthy provisions.

²⁰⁹ 2.0 L Consent Decree, *supra* note 169, at App. D, paras. 5.2, 5.3, 6.1.

²¹⁰ *Id.* at App. A, para. 6.3.

²¹¹ *Id.* at para. 17.

²¹² Order Approving Trust Agreements and Establishing Trusts, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:16-cv-00295-CRB (N.D. Cal. Sept. 19, 2017), ECF No. 49.

²¹³ United States' Notice of Filing of Trust Agreements, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:16-cv-00295-CRB (N.D. Cal. Oct. 2, 2017), ECF No. 51.

²¹⁴ *See generally*, 2.0 L Consent Decree, *supra* note 169.

First among the noteworthy provisions, the Consent Decree contained two key admissions regarding Volkswagen's misconduct. Specifically, Volkswagen admitted its misconduct:

[T]hat software in the 2.0 Liter Subject Vehicles enables the vehicles' ECMs [electronic control modules] to detect when the vehicles are being driven on the road, rather than undergoing the Federal Test Procedures, and that this software renders certain emission control systems in the vehicles inoperative when the ECM detects the vehicles are not undergoing [the] Federal Test Procedures, resulting in emissions that exceed EPA-compliant and CARB-compliant levels when the vehicles are driven on the road.²¹⁵

Volkswagen also admitted:

[T]hat this software was not disclosed in the Certificate of Conformity and Executive Order applications for the 2.0 Liter Subject Vehicles, and, as a result, the design specifications of the 2.0 Liter Subject Vehicles, as manufactured, differ materially from the design specifications described in the Certificate of Conformity and Executive Order Applications.²¹⁶

Admissions of liability are not a typical feature of a consent decree, where instead defendants often neither admit nor deny liability for the allegations against them. Volkswagen's admissions in the Consent Decree cut to the core of the CAA violations alleged in the United States' Complaint.

The Consent Decree also uniquely addresses Volkswagen's many reporting requirements during the life of the settlement. For instance, the Consent Decree contains a stipulated penalty provision subjecting Volkswagen to a \$1 million penalty for submitting a "knowingly false, fictitious, or fraudulent statement or representation of material fact."²¹⁷ In addition, many of the reports to be submitted to EPA and CARB under the Decree must be signed by an officer or director containing a certification swearing to the truth of the submission explicitly under penalty of perjury.²¹⁸ These provisions subject Volkswagen to both criminal perjury charges and a stipulated penalty for false statements. Given Volkswagen's deceptive conduct over the course of many years, it is plain to see why such provisions are appropriate and necessary.

²¹⁵ *Id.* at 2.

²¹⁶ *Id.* at 3.

²¹⁷ *Id.* at para. 41.c.

²¹⁸ *Id.* at para. 33.

c. FTC and Class Action 2.0 Liter Settlements

On the same day that the United States and California lodged the 2.0 Liter Consent Decree, the PSC and FTC filed 2.0 liter settlements of their own that were based on the 2.0 Liter Consent Decree. All three agreements memorialized Volkswagen's commitment to pay up to \$10.033 billion to fund the single buyback program required under all three settlements.²¹⁹ The PSC and FTC agreements also used this fund to provide monetary compensation to injured consumers in addition to vehicle value—including restitution damages for fraud and misrepresentation that exceeded the Retail Replacement Value required by the 2.0 Liter Consent Decree. At the press conference, FTC Chairwoman Edith Ramirez stated, "Our goal in this case was to ensure that affected consumers receive full compensation."²²⁰

The PSC agreement detailed Volkswagen's commitment through a precise buyback and owner/lessee restitution formula. Each owner participating in the settlement class received a restitution payment that equaled a minimum of \$5,100 regardless of whether they chose to participate in the buyback or receive an approved vehicle modification.²²¹ If the owner chooses a buyback, the owner also receives a vehicle value payment in addition to the restitution payment, which together exceed the Retail Replacement Value of the 2.0 Liter Consent Decree.²²²

The PSC settlement also included all the necessary requirements for a class action consumer settlement. That is, the settlement document contained a detailed long-form notice to be sent to prospective class members, informing them of their rights and benefits under the settlement agreement.²²³ Because the PSC settlement was also part of a parallel

²¹⁹ *Id.* at 6; Class Action Settlement, *supra* note 180, at 2-3; FTC 2.0 L Order, *supra* note 181, at 13.

²²⁰ Edith Ramirez, Chairwoman, FTC, Remarks at Volkswagen Press Conference (June 28, 2016), https://www.ftc.gov/system/files/documents/public_statements/967123/er_vw_remarks_pressconference.pdf.

²²¹ Class Action Settlement, *supra* note 180.

²²² *Id.*

²²³ *Id.* at Exhibit 3. The PSC settlement also satisfied the required standards under Fed. R. Civ. P. 23(a) and (b)(3). *See* Order Granting Final Approval of the 2.0-Liter TDI Consumer and Reseller Dealership Class Action Settlement at 9-10, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 25, 2018), ECF No. 2102. Specifically with regard to Rule 23(a), the PSC demonstrated that the class was sufficiently numerous, with common questions of law or fact, that the claims or defenses of representative parties are typical of the claims or defenses of the class, and the representative parties fairly and adequately protected the interests of the class. *See* FED. R. CIV. P. 23(a)(1)-(4). To meet the requirements of Rule 23(b)(3), the PSC settlement had to satisfy the additional elements that questions of law or fact common to class members predominated over any questions affecting only

process alongside the 2.0 Liter Consent Decree, this class action long form notice, once approved by the Court, also served as the allowable mechanism for providing notice of the buyback program under the 2.0 Liter Decree.²²⁴

For its part, the proposed FTC Order contained the same benefits and payments as the PSC Settlement did for class members.²²⁵ However, rather than the detailed formula for calculating consumer payments contained in the PSC Settlement, the FTC Order contained a two-column chart listing every affected vehicle by VIN and the exact dollar figure each consumer was entitled to receive under the Order.²²⁶ The FTC Order also included “injunctive provisions to protect consumers from deceptive claims in the future” such as prohibiting Volkswagen “from making any misrepresentations that would deceive consumers about the environmental benefits or value of its vehicles or services . . .”²²⁷

d. Court Approval of 2.0 Liter Settlements

Following the announcement of the settlements on June 28, 2016, the United States and the PSC each followed the necessary legal procedures for obtaining ultimate approval by the court of their respective settlements, including public notice and comment for the United States and class action procedures under Federal Rule of Civil Procedure 23 for the PSC. The United States posted notice of its settlement in the Federal Register on July 6, 2016, providing the public the opportunity to submit comments regarding the proposed decree.²²⁸ The Court held a hearing seeking preliminary approval of the PSC’s proposed settlement on July 26, 2016, during which the Court considered whether it was “satisfied preliminarily” that the proposed agreement “appears to be an appropriate settlement”²²⁹ Following preliminary approval, the PSC issued the long-form notice to prospective 2.0 liter class members, alerting them to the buyback and consumer restitution benefits available under the settlement.

individual members, and a class action is superior to other available methods for fairly and efficiently adjudicating the controversy. FED. R. CIV. P. 23(b)(3).

²²⁴ 2.0 L Consent Decree, *supra* note 169, at App. A, para. 3.1.1.

²²⁵ Press Release, FTC, Volkswagen to Spend up to \$14.7 Billion to Settle Allegations of Cheating Emissions Tests and Deceiving Customers on 2.0 Liter Diesel Vehicles (June 28, 2016), <https://www.ftc.gov/news-events/press-releases/2016/06/volkswagen-spend-147-billion-settle-allegations-cheating>. The Commission vote approving the settlement was 3-0. *Id.*

²²⁶ See, e.g., FTC 2.0 L Order, *supra* note 181, Attachment 1C.

²²⁷ Press Release, *supra* note 225.

²²⁸ Notice of Lodging of Proposed Partial Consent Decree Under the Clean Air Act, 81 Fed. Reg. 44,051 (July 6, 2016).

²²⁹ Transcript of Proceedings at 10, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. July 28, 2016), ECF No. 1692.

During the thirty day public comment period, the United States received a total of 1,195 comments.²³⁰ Many of the comments “came from affected Volkswagen and Audi vehicle owners and lessees who offered their comments on the buyback, lease termination, and emissions modification aspects of the proposed settlement.”²³¹ Other comments “came from individuals and various public, private, non-profit, and for-profit entities and offices and addressed multiple aspects of” the decree, including the Environmental Mitigation Trust and the ZEV Investment components.²³² Commenters included representatives from forty-four state government offices, three cities, and three entities affiliated with recognized Indian tribes.²³³ In its motion for entry of the Consent Decree filed on September 30, 2016, the United States explained why none of the comments received should prevent the court from entering the consent decree.²³⁴

The PSC reported to the Court in its Motion for Final Approval of the 2.0 liter class settlement that the initial response to the proposed settlements was “overwhelmingly positive.”²³⁵ Just three months after the settlements had been announced, and before the Court had even given final approval, over 300,000 owners, lessees, and eligible sellers had taken affirmative steps to register for the relief offered by the settlements.

The Court held the final approval hearing for the 2.0 liter settlements on October 18, 2016.²³⁶ Following an opportunity for settlement class objectors to be heard regarding the settlement, the Court indicated it was “strongly inclined to approve the settlement,” noting the “urgency” in bringing the matter to a conclusion.²³⁷ The Court subsequently approved and entered the 2.0 Liter Consent Decree, as well as the proposed FTC Order and PSC Class Action settlement on October 25, 2016.²³⁸

²³⁰ 2.0 L MTE, *supra* note 190, at 6-7.

²³¹ *Id.*

²³² *Id.* at 8.

²³³ *Id.* Exhibit 3 at 1-7.

²³⁴ *Id.* at 21. *See id.* Exhibit 5.

²³⁵ Plaintiffs’ Reply Memorandum in Support of Motion for Final Approval of the 2.0-Liter TDI Consumer and Reseller Dealer Class Action Settlement at 8, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Sept. 30, 2016), ECF No. 1976.

²³⁶ *See* Transcript of Proceedings, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 18, 2016), ECF No. 2079.

²³⁷ *Id.* at 105.

²³⁸ Order Granting the United States’ Motion to Enter Proposed Amended Consent Decree, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 25, 2016), ECF No. 2103; Partial Stipulated Order for Permanent Injunction and Monetary Judgment, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 25, 2016), ECF No. 2104; Order Granting Final Approval of the 2.0-Liter TDI Consumer and Reseller Dealership Class Action Settlement, In re:

e. State UDAP Settlements

In addition to the 2.0 Liter Consent Decree, the PSC Class Action settlement and the FTC Stipulated Order that were all filed on June 28, 2016, Volkswagen also announced on that date settlements with the vast majority of states to resolve claims brought under their respective Unfair and Deceptive Acts and Practices (“UDAP”) laws.

Volkswagen agreed to pay an \$86 million penalty to California to resolve unfair competition claims.²³⁹ Volkswagen agreed to pay an additional \$603 million to resolve the claims of forty-four states, the District of Columbia, and Puerto Rico.²⁴⁰ Approximately \$583 million would be divided among the signatory states and \$20 million was directed to the National Association of Attorneys General (“NAAG”) for use by state attorneys general for consumer protection oversight, training and enforcement, and for the reimbursement of costs and expenses related to this matter.

2. The Cars on the Road – 3.0 Liter Settlements

Following the lodging of the 2.0 liter partial consent decree, the parties immediately turned their attention to the approximately 90,000 3.0 liter vehicles that posed similar environmental concerns. Through a series of lengthy settlement negotiations supervised by the Settlement Master, the parties worked to put together a framework for settlement. In some ways, the resulting settlements ran parallel to the already-existing 2.0 liter settlement, but they also differed in important ways.

a. The 3.0 Liter Consent Decree

The first court hearing following the entry of the 2.0 liter settlements was held on November 3, 2016. The Court noted it had been advised by the Settlement Master that there had already been “substantial progress among the parties in reaching a resolution,” and the Court was “very optimistic we will achieve a resolution of the 3-liter vehicles.”²⁴¹ The

Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Oct. 25, 2016), ECF No. 2102.

²³⁹ Partial Consent Decree at 11, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Sept. 1, 2016), ECF No. 1801.

²⁴⁰ Press Release, Volkswagen, Volkswagen Reaches Settlement Agreements with U.S. Federal Regulators, Private Plaintiffs and 44 U.S. States on TDI Diesel Engine Vehicles (June 28, 2016), <https://media.vw.com/en-us/releases/715>. See also Non-177 States’ Joint Opening Brief in Support of Motions to Remand, Ex. O, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 31, 2017), ECF No. 2834.

²⁴¹ Transcript of Proceedings at 5-6, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Nov. 7, 2016), ECF No. 2166.

Court gave the parties until December 1, 2016 to reach a resolution as to the remaining vehicles in the case.²⁴² That deadline was subsequently extended to December 19.²⁴³ On December 19, the Court granted one final extension until 11:00 a.m. the following morning to reach a 3.0 liter settlement.²⁴⁴ The Court noted:

THE COURT: This is a complicated matter. I believe lead counsel for the plaintiff's Steering Committee said that the devil is in the details, and it is to some extent. There are a lot of details, a lot of moving parts, and there are a lot of parties. We're—you know, of course, we're talking about the Department of Justice. We're talking about various states, California being the principal one involved. We're talking about the Federal Trade Commission. We're talking about many, many parts. And what the parties are attempting to achieve here is a global resolution; that is, one that will incorporate these various parties in various ways.

And in order to do that, because the concerns are individual to the party, there has to be extraordinary coordination among the parties and there has to be resolution of a lot of issues, which look to some of us as just details, but to others the details have real significance.²⁴⁵

On December 20th, the United States lodged a second partial consent decree with the court, partially resolving the United States' and California's injunctive relief claims for the roughly 90,000 3.0 liter vehicles.²⁴⁶ In noting EPA's "public health imperative to hold Volkswagen accountable and remedy the illegal pollution," Cynthia Giles, EPA's then-Assistant Administrator for Enforcement and Compliance Assurance marked the 3.0 Liter Consent Decree as "another important settlement that delivers on EPA's essential public health mission."²⁴⁷

²⁴² *Id.*

²⁴³ Transcript of Proceedings at 5, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Dec. 21, 2016), ECF No. 2578.

²⁴⁴ Transcript of Proceedings at 3, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Dec. 19, 2016), ECF No. 2516.

²⁴⁵ *Id.* at 2-3.

²⁴⁶ Second Partial Consent Decree, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Dec. 20, 2016), ECF No. 2520 [hereinafter 3.0 L Consent Decree].

²⁴⁷ Press Release, DOJ, Volkswagen to Recall 83,000 3.0 Liter Diesel Vehicles and Fund Mitigation Projects to Settle Allegations of Cheating Emissions Tests on Volkswagen, Audi and Porsche Vehicles (Dec. 20, 2016), <https://www.justice.gov/opa/pr/volkswagen-recall-83000-30-liter-diesel-vehicles-and-fund-mitigation-projects-settle>.

i. Generation 1 and Generation 2 Vehicles

Under the proposed 3.0 liter settlement structure, the older model 3.0 liter cars (referred to as “Generation 1” in the settlement documents, and consisting of model year 2009-2012 Volkswagen Touareg and Audi Q7 SUVs) would be treated in the same way as the vehicles under the 2.0 liter settlement. That is, Volkswagen conceded that the vehicles could not, within a reasonable timeframe, be brought into compliance with applicable emission standards, and the company was required to offer a buyback or lease termination for all affected vehicles currently on the road in the United States.²⁴⁸ The company also had the option, with respect to the Generation 1 vehicles, of proposing emissions modifications that would substantially reduce emissions from the vehicles (albeit not to the levels the vehicles were originally certified).²⁴⁹ If the emissions modification was subsequently approved by EPA and CARB in accordance with the standards and procedures set forth in the settlement, Volkswagen was required to offer the modification to eligible owners and lessees as an alternative to a buyback or lease termination.²⁵⁰ These aspects of the 3.0 liter settlement were all consistent with the main vehicle-related aspects of the 2.0 liter agreement that had been entered by the Court in October 2016.

The 3.0 liter settlement differed from the 2.0 liter settlement framework in its treatment of the newer “Generation 2” vehicles (model year 2013-2016 vehicles, consisting of the Volkswagen Touareg, Audi SUVs and larger passenger cars, and the Porsche Cayenne Diesel).²⁵¹ For these vehicles, Volkswagen believed that the vehicles could be made to meet the emission standards to which the vehicles had originally been certified.²⁵² Accordingly, the United States and California agreed to a framework whereby Volkswagen would be given the option to seek approval for an Emissions Compliant Recall that would bring the vehicles into compliance with their certified exhaust emission standards. Under the agreed settlement, if such approval was given, Volkswagen would not be required to offer buybacks or lease terminations for the affected vehicles. As described by the Court during the December 20 status conference:

THE COURT: It is my understanding that unlike the Generation I vehicles, Volkswagen believes it can make the Generation II

²⁴⁸ 3.0 L Consent Decree, *supra* note 246, at 3.

²⁴⁹ *See id.* at App. B § IV.

²⁵⁰ *See id.* at App. A §§ IV-V.

²⁵¹ *Id.* at 4. *See also id.* at App. A §§ VI-VII, App. B § IV.

²⁵² Transcript of Proceedings at 5, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Dec. 21, 2016), ECF No. 2581.

vehicles fully emissions compliant. If Volkswagen can, then it will not be required to buy them back. If Volkswagen cannot, then consumers with Generation II vehicles will have options like those available to the Generation I consumers, including the option to have Volkswagen buy back their vehicle; and subject to governmental approval after further testing, the option to have the consumer's vehicle modified in accordance with the agreement; and for a leased car, the option to cancel the lease and return the car to Volkswagen. The agreement will fully address any excess emissions or [NOx] coming from these vehicles and the environmental consequences from these excess emissions by requiring Volkswagen to supplement the trust that will be established under the 2-liter settlement.²⁵³

Thus, the Emissions Compliant Recall for the Generation 2, 3.0 liter vehicles differed from the 2.0 liter settlement. However, the “fallback” option of a less-than-compliant emissions modification was consistent with the 2.0 liter settlement framework. That is, if Volkswagen failed to attain the certified standard, it could still propose a modification to improve emissions, but would be required to offer buybacks and lease terminations for the vehicles, just as it had for all of the other vehicles at issue in the case.

ii. Differences Between the 2.0 Liter and 3.0 Liter Consent Decrees

The 3.0 Liter Consent Decree differed from the 2.0 Liter Consent Decree in one other important aspect. The 2.0 Liter Consent Decree was announced in tandem with related agreements involving the PSC and the FTC. The three separate agreements were interrelated and they overlapped to achieve comprehensive complimentary environmental and consumer relief.²⁵⁴ The 3.0 Liter Consent Decree was filed alone and did not specifically refer to any other settlement. When the 3.0 Liter Consent Decree was filed, the PSC and the FTC had not yet reached any agreement with Volkswagen.

Because the 3.0 Liter Consent Decree was negotiated and filed as an agreement by itself, it contained a number of details regarding the Recall Program Administration that are not found in the 2.0 Liter Consent Decree.²⁵⁵ Under this set of provisions, the United States, California, and

²⁵³ *Id.* at 5-6.

²⁵⁴ “Class Action Settlement” and “FTC Order” were both explicitly defined terms in the 2.0 Liter Consent Decree. *See* 2.0 L Consent Decree, *supra* note 169, at App. A §§ 2.5, 2.9. Also, payments under the PSC and FTC settlements were explicitly determined to meet or exceed Retail Replacement Value. *Id.* § 4.1.

²⁵⁵ 3.0 L Consent Decree, *supra* note 246, at App. A-1. *Cf.* 2.0 L Consent Decree, *supra* note 169, at App. A.

Volkswagen agreed to a detailed formula that would set the buyback price (Retail Replacement Value) for all Generation 1 vehicles (as well as for Generation 2 vehicles, in the event that an Emissions Compliant Recall for Generation 2 was not approved).²⁵⁶ The Retail Replacement Value included components such as vehicle value, state and local tax payments and other associated owner expenses.²⁵⁷ Appendix A-1 also included terms specifying how the buyback and lease termination program was to be administered, through the establishment of a “Claims Program” overseen by a “Program Supervisor.”²⁵⁸ None of these terms were found in the 2.0 Liter Consent Decree because under that settlement, the United States and California had agreed that Volkswagen could fulfill its buyback and lease termination obligations by complying with the terms of the PSC or FTC agreements that were simultaneously filed with the 2.0 Liter Consent Decree and simultaneously entered by the Court.

iii. Relation to Potential Forthcoming PSC and FTC Settlements

The federal and state environmental regulators had achieved a settlement with Volkswagen that comprehensively addressed the environmental concerns attributable to the 3.0 liter vehicles. However the United States, California, and Volkswagen also drafted the 3.0 Liter Consent Decree to accommodate a potential consumer settlement, should the PSC and/or the FTC reach an agreement with Volkswagen for their claims in the near term by including a section entitled “Relation to Other Settlements.”²⁵⁹ Under this section, the parties agreed that even though the 3.0 liter decree specified all the applicable terms for administering a buyback and lease termination program, and for paying Retail Replacement Value to vehicle owners in exchange for their vehicles, Volkswagen could satisfy its buyback and lease termination obligations under the decree by fulfilling its obligations under a future “parallel agreement” with the PSC or FTC, provided certain criteria were met.²⁶⁰ In other words, if the PSC or FTC eventually achieved a settlement with Volkswagen, that settlement could be made consistent and overlap with the 3.0 Liter Consent Decree by satisfying the terms set forth in this section of the Consent Decree. Most importantly, a parallel agreement negotiated by the PSC or FTC had to satisfy two required elements: the agreement would have to pay at least Retail Replacement Value to vehicle

²⁵⁶ *Id.* at App. A-1 § 1.1.

²⁵⁷ *Id.*

²⁵⁸ *See Id.* §§ 2.12.6.

²⁵⁹ *Id.* § III.

²⁶⁰ *Id.* § 3.2.

owners in the event of a buyback; and the agreement would have to be filed with the Court no later than January 31, 2017.

iv. Remaining Terms of the 3.0 Liter Consent Decree

The 3.0 Liter Consent Decree also required Volkswagen to pay an additional \$225 million to the Environmental Mitigation Trust that was established pursuant to the 2.0 liter settlement.²⁶¹ The additional money would be apportioned among the states, the District of Columbia, Puerto Rico, and federally recognized Indian tribes, similar to the apportionment in the 2.0 liter settlement, and available to fund the same list of NO_x-reducing projects, with the goal of reducing NO_x to mitigate past and future excess emissions from these 3.0 liter vehicles.

Like the 2.0 Liter Consent Decree, the 3.0 Liter Consent Decree established an eighty-five percent recall target for each of the Generation 1 and Generation 2 vehicle groups.²⁶² If Volkswagen fails to achieve eighty-five percent capture of Generation 1 vehicles (between both the buyback/lease termination and emissions modifications) by November 30, 2019, it must augment the mitigation trust fund by \$5.5 million per percentage point it falls short of eighty-five percent. For the Generation 2 vehicles, Volkswagen must achieve eighty-five percent capture (with an Emissions Compliant Recall, or if no such recall is approved, buyback/lease termination and potential emissions modification) by May 31, 2020, or pay into the mitigation trust \$21 million for each percentage point short of eighty-five percent.

b. 3.0 Liter PSC and FTC Settlements

On December 22, 2016, the Court announced that the PSC had reached a conceptual agreement.²⁶³ The FTC, “pending resolution of remaining issues and final Commission approval,” also supported the framework.²⁶⁴ Like the 3.0 Liter Consent Decree, the PSC’s 3.0 liter settlement framework also divided the vehicles into Generation 1 and Generation 2, with the Generation 2 vehicles eligible for an Emissions Compliant Recall (or in the language of the PSC agreement, an “Emissions Compliant Repair”) that would obviate the need for a buyback, in the event that this option was approved by EPA and CARB. The Court gave

²⁶¹ See 3.0 L Consent Decree, *supra* note 246, at § 17.

²⁶² *Id.* at App. A § X.

²⁶³ Transcript of Proceedings at 6, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig. No. 3:15-md-02672-CRB (N.D. Cal. Jan. 10, 2017), ECF No. 2757.

²⁶⁴ *Id.*

the PSC, FTC and Volkswagen until January 31, 2017 to finalize and file their agreements:²⁶⁵

Because Generation 1 vehicles will not be returned to compliance with the emissions standards to which they were originally certified, a Buyback, Trade-In, and Lease Termination Option will become available to those holding Generation One Eligible Vehicles shortly after Final Approval, in addition to any Reduced Emissions Modification that later becomes available. The Buyback, Trade-In, and Lease Termination Options will become available to owners and lessees of Generation Two Eligible Vehicles (or some subset thereof) only if an Emissions Compliant Repair does not become available in a timely manner.²⁶⁶

The total consumer compensation directed to be paid to 3.0 liter class members under the PSC and FTC agreements equaled \$1.2 billion in combined compensation in the event that EPA and CARB approved the Emissions Compliant Recall and therefore not trigger the buyback requirement for 3.0 liter Generation 2 vehicles.²⁶⁷ If a buyback for Generation 2 vehicles is required, the total combined estimated compensation for class members under the PSC and FTC agreements is \$4.04 billion.²⁶⁸ In order to satisfy the framework required by the 3.0 Liter Consent Decree, all payments to Eligible Owners under the PSC agreement were required to equal or exceed Retail Replacement Value.²⁶⁹

²⁶⁵ See Transcript of Proceedings at 43, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 20, 2017), ECF No. 2801. (“THE COURT: So as we know, January 31st is one of those deadlines that the Court just simply isn’t going to move, and we’ll anticipate filings on or before that date with respect to the 3-liter cars[.]”). The PSC and the FTC subsequently filed their proposed settlements on January 31, 2017. [Proposed] Second Partial Stipulated Order for Permanent Injunction and Monetary Judgment, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 31, 2017), ECF No. 2843 [hereinafter FTC 3.0 L Order]; Plaintiffs’ Notice of Motion, Motion, and Memorandum in Support of Preliminary Approval of the 3.0-Liter TDI Class Action Agreement and Approval of Class Notice, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 31, 2017), ECF No. 2840 [hereinafter PSC 3.0 L Memorandum]. The settlements again tracked the framework set forth in the 3.0 Liter Consent Decree, treating the Generation 1 and Generation 2 vehicles differently.

²⁶⁶ Consumer and Reseller Dealership 3.0-Liter Class Action Settlement Agreement and Release (Amended) at 2, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Feb. 10, 2017), ECF No. 2894 [hereinafter 3.0 L Consumer Settlement].

²⁶⁷ *Id.* at 2; FTC 3.0 L Order, *supra* note 265, at 15.

²⁶⁸ 3.0 L Consumer Settlement, *supra* note 266 at 2-3.

²⁶⁹ PSC 3.0 L Memorandum, *supra* note 265, at para. 5.6.

Lastly, on January 31, 2017 the PSC and FTC also announced a comprehensive settlement with the Bosch defendants that covered both 2.0 liter and 3.0 liter vehicle owners and lessees.²⁷⁰

d. Court Approval of 3.0 Liter Settlements

After the PSC and FTC filed their settlements on January 31, the United States extended the public comment period on the 3.0 Liter Consent Decree. The United States received a total of 104 comments during the comment period, mostly from private citizens but also from a small number of government offices, businesses, and institutions or associations. As with the 2.0 Liter Consent Decree, all of the comments were filed publicly with the Court.

Many of the comments that the United States received were from owners or lessees of 3.0 liter Generation 2 vehicles, who were concerned that they were being treated differently from other vehicle owners and lessees in the case, and who believed that there should be an automatic right to a buyback or lease termination for all Generation 2 vehicles. The Court acknowledged this anticipated concern during its February 14, 2017 hearing when giving preliminary approval to the PSC's class action settlement stating:

THE COURT: Now, some people will say look, we could solve this whole problem just by a buyback . . . and then you have to ask yourself is that actually environmentally responsible? If these cars can be brought back to what a consumer expected in terms of the performance, is it really environmentally sound to essentially waste money, assets, material, time, all of those things that led us up to where we are today? Does that make sense? In

²⁷⁰ Plaintiffs' Notice of Motion, Motion, and Memorandum in Support of Preliminary Approval of the Bosch Class Action Settlement Agreement and Release and Approval of Class Notice, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 31, 2017), ECF No. 2838. Under the PSC and FTC agreements, Bosch would pay \$350 to eligible 2.0 Liter class member owners and \$200 to eligible 2.0 Liter class member lessees. For the 3.0 Liter vehicles, eligible class member owners and lessees would receive \$1,500 and \$1,200, respectively. The total compensation available to be paid to eligible class members under the Bosch agreement was \$327,500,000, allocated according to terms specified by the FTC. These payments were in addition to any payment required to eligible class members under the 3.0 Liter and 2.0 Liter settlements with the Volkswagen defendants. *See* Order Granting Final Approval of the Bosch Class Action Settlement at 3-4, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 17, 2017), ECF No. 3230.

the Court's view, though I'll hear comments from class members and so forth, it doesn't. It doesn't.²⁷¹

Thus in the Court's view, and in the view of the United States and California,²⁷² a buyback and lease termination option was not necessary under the CAA where the vehicles could be made compliant with their originally certified emissions standard.

Following the Court's consideration of the 104 received public comments, as well as the final approval hearing for the class action settlement on May 11, 2017, during which objecting class members voiced their concerns about the proposed PSC agreement, the Court made its decision. It granted final approval and entered the 3.0 Liter Consent Decree, 3.0 liter class action settlement, Bosch class action settlement, and FTC consent order on May 17, 2017. The Court noted in particular that the 3.0 liter settlements were "no mere slap on the wrist" when considered in connection with all the various settlement agreements Volkswagen had entered into since June 2016.²⁷³ Altogether, Volkswagen had agreed to pay up to \$10.033 billion to buy back the 2.0 liter vehicles, between \$1.2 billion and over \$4 billion to buy back the 3.0-liter vehicles, \$2.925 billion to fund the environmental mitigation trust, and \$2 billion to promote zero-emissions technology.²⁷⁴ The Court also noted the substantial criminal and civil penalties imposed to date against Volkswagen outside of the MDL proceeding, resulting in an additional \$4.3 billion paid in connection with related criminal and civil claims.²⁷⁵

3. Third Consent Decree: Penalty and Injunctive Relief

The third and final civil Consent Decree imposed a civil penalty and additional injunctive relief designed to ensure that the misconduct does

²⁷¹ Transcript of Proceedings at 63-64, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Feb. 16, 2017), ECF No. 2917.

²⁷² United States' Notice of Motion, Motion, and Memorandum in Support of Entry of Second Partial Consent Decree in *United States of America v. Volkswagen Ag, et al.* Case No. 2:16-cv-10006 (E.D. Mich. 2016) at 16-17, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Mar. 24, 2017), ECF No. 3083.

²⁷³ Order Granting Final Approval of the Consumer and Reseller Dealership 3.0-Liter Class Action Settlement at 39, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 17, 2017), ECF No. 3229 [hereinafter Order 3.0 L Consumer Settlement].

²⁷⁴ *Id.* The State of California also entered into an additional settlement with Volkswagen at the time the 3.0 Liter Consent Decree was announced, providing for a \$25 million payment to CARB to support electric vehicle aspects of California's EFMP Plus Up program. Second Partial Consent Decree at 9-10, *California v. Volkswagen AG*, 3:16-cv-03620-CRB (N.D. Cal. May 17, 2017), ECF No. 18. The Court approved California's Second Partial Consent Decree on May 17, 2017. *See id.* at 19.

²⁷⁵ *See* Order 3.0 L Consumer Settlement, *supra* note 273, at 39. *See also* Section IV, *infra*.

not happen again. Both elements are important components of any CAA civil enforcement matter.²⁷⁶ Penalties serve to both punish and to specifically deter future wrongdoing from the defendant, and to generally deter wrongdoing from others in the defendant's regulated community. The \$16 billion of relief secured from Volkswagen in the 2.0 Liter and 3.0 Liter Consent Decrees addressed the harm to the environment and consumers resulting from Volkswagen's CAA violations. Although a substantial sum of money, the relief was restitutionary in nature, not a penalty. Consequently, after the United States filed the 3.0 Liter Consent Decree with the court in November 2016, it immediately turned its attention to securing an appropriate civil penalty and additional injunctive relief from Volkswagen.

a. CAA Civil Penalty – Background

The CAA sets forth a list of factors for a court to consider when determining the amount of a civil penalty.²⁷⁷ The factors are:

[T]he gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with this subchapter, action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require.²⁷⁸

Courts of appeals are highly deferential to district court penalty determinations, so long as they do not exceed the statutory maximum and are based on sound methodology, even if not a precise calculation.²⁷⁹ There is "no mathematical formula which can be applied to the overall effort of assessing a fair penalty."²⁸⁰ Each case "must be decided on its facts" based on the applicable statutory factors.²⁸¹

Because the statutory penalty factors provide the framework the judge will use to determine whether a penalty is appropriate, the parties negotiating a penalty often consider the factors when arriving at an agreed upon settlement.²⁸² Factors such as "gravity" and "ability to continue in

²⁷⁶ See 42 U.S.C. § 7524(a).

²⁷⁷ See 42 U.S.C. § 7524(b).

²⁷⁸ *Id.*

²⁷⁹ See *United States v. Smithfield Foods, Inc.*, 191 F.3d 516, 529 (4th Cir. 1999); *United States v. Allegheny Ludlum Corp.*, 366 F.3d 164, 178 n.6 (3d Cir. 2004).

²⁸⁰ *United States v. Gulf Park Water Co.*, 14 F. Supp. 2d 854, 868 (S.D. Miss. 1998).

²⁸¹ *Id.*

²⁸² EPA, CLEAN AIR ACT MOBILE SOURCE CIVIL PENALTY POLICY TITLE II OF THE CLEAN AIR ACT VEHICLE AND ENGINE EMISSIONS CERTIFICATION REQUIREMENTS (2009). EPA's Penalty Policy "is not intended to and does not control the penalty amount requested in judicial actions."

business” are relatively straightforward and readily understandable—they implicate the seriousness of the violations²⁸³ and the defendant’s ability to pay the penalty without putting the company out of business.²⁸⁴ The parties may also consider “such other matters as justice may require.”²⁸⁵ EPA’s published Mobile Source Penalty Policy assists the regulated community to understand how the agency will approach assessing a penalty in a CAA mobile source case administrative actions and often in negotiating the resolution of judicial actions.

b. Volkswagen Civil Penalty

On, January 11, 2017, the United States lodged its third and final civil consent decree with the court.²⁸⁶ At a press conference, Attorney General Loretta Lynch announced the settlement, along with Volkswagen AG’s agreement to plead guilty and the indictment of six Volkswagen executives and employees, “[t]oday’s actions reflect the Justice Department’s steadfast commitment to defending consumers, protecting our environment and our financial system and holding individuals and companies accountable for corporate wrongdoing.”²⁸⁷

Under the terms of the decree, Volkswagen was required to pay a \$1.45 billion civil penalty in a single lump sum payment within thirty days of the decree being entered by the court, plus interest from the date of lodging.²⁸⁸ All of the Defendants were jointly and severally liable for the payment of the penalty.²⁸⁹

The proposed penalty was part of a number of coordinated federal resolutions pertaining to Volkswagen’s 2.0 liter and 3.0 liter subject vehicles that totaled approximately \$4.3 billion. These include: (1) a \$2.8

Id. at 3. It is EPA’s policy, in judicial actions, to request that DOJ assert a claim for up to the maximum penalty allowable under the CAA. *Id.*

²⁸³ To consider seriousness or gravity, courts look at number, duration, and degree of the violations, as well as the actual or potential harm to human health and the environment. *United States v. Smithfield Foods, Inc.*, 972 F. Supp. 338, 343 (E.D. Va. 1997).

²⁸⁴ To assess this factor, courts may look at liabilities, assets, and income from tax returns and other relevant financial documents. *See e.g.*, *Idaho Conservation League v. Atlanta Gold Corp.*, 879 F. Supp. 2d 1148, 1168 (D. Idaho 2012).

²⁸⁵ 42 U.S.C § 7524(b).

²⁸⁶ *See* Third Partial Consent Decree, In re: Volkswagen “Clean Diesel” Marketing, Sales Practices, and Products Litigation, No. 3:15-md-02672-CRB (N.D. Cal. Jan. 11, 2017), ECF No. 2758 [hereinafter Third Consent Decree].

²⁸⁷ Press Release, DOJ, Volkswagen AG Agrees to Plead Guilty and Pay \$4.3 Billion in Criminal and Civil Penalties; Six Volkswagen Executives and Employees are Indicted in Connection with Conspiracy to Cheat U.S. Emissions Tests (Jan. 11, 2017), <https://www.justice.gov/opa/pr/volkswagen-ag-agrees-plead-guilty-and-pay-43-billion-criminal-and-civil-penalties-six>.

²⁸⁸ Third Consent Decree, *supra* note 286, at para. 9.

²⁸⁹ *Id.* at para. 4.

billion fine as part of a plea agreement to resolve criminal charges brought by DOJ's Criminal Division, the U.S. Attorney's Office for the Eastern District of Michigan and the Environment and Natural Resources Division's Environmental Crimes Section;²⁹⁰ (2) the \$1.45 billion civil CAA penalty that resolved EPA's civil CAA claims; (3) and a \$50 million penalty to resolve DOJ Civil Division's claims under FIRREA.²⁹¹

The \$1.45 billion Volkswagen civil penalty was the largest civil penalty ever under the CAA, fourteen times larger than the previous largest penalty.²⁹² Divided across the approximately 580,000 vehicles at issue in the case, the penalty averaged out to around \$2,500 per-vehicle. When combined with the criminal penalty, the total \$4.3 billion penalty is one of the largest in United States history.

c. Volkswagen Injunctive Relief – Corporate Compliance Plan and Independent Auditor

In addition to resolving the civil penalty, the Third Consent Decree also set forth important injunctive relief measures Volkswagen was required to implement in the form of a corporate compliance plan.²⁹³ These corporate reforms and additional testing protocols are intended to prevent Volkswagen's future violation of Title II of the Act.²⁹⁴

The Third Consent Decree requires the company to segregate the duties of employees that work in product development from those that work in vehicle certification testing in order to avoid potential conflicts of interest.²⁹⁵ A group must be established within each company to monitor developments in relevant U.S. environmental law, and to assist the company in complying with current and future U.S. laws regarding vehicle certification.²⁹⁶ New testing protocols require vehicle emissions

²⁹⁰ The criminal resolution is discussed in more detail *infra* Section IV.

²⁹¹ Financial Institutions Reform, Recovery, and Enforcement Act of 1989, Pub. L. No. 101-73 (1989). The related civil resolutions are discussed in more detail *infra* Section III.C.3.d.

²⁹² Prior to the Volkswagen penalty, the largest CAA penalty ever awarded was \$100 million against *Hyundai/Kia* in 2014 for falsifying gas mileage data for nearly 1.2 million vehicles, equating to a per-vehicle penalty of approximately \$85. *See* Press Release, *supra* note 132. Another diesel engine matter that was resolved during the pendency of the Volkswagen case, *Detroit Diesel*, resulted in a \$14 million civil penalty for 7,786 vehicles. Press Release, DOJ, Detroit Diesel Corporation to Pay Penalty and Reduce Exposure to Harmful Diesel Exhaust to Resolve Clean Air Act Violations (Oct. 6, 2016), <https://www.justice.gov/opa/pr/detroit-diesel-corporation-pay-penalty-and-reduce-exposure-harmful-diesel-exhaust-resolve>. The *Detroit Diesel*, \$1,798 per-vehicle penalty was the largest *per-vehicle* CAA penalty prior to the Volkswagen penalty. *See id.*

²⁹³ Third Consent Decree, *supra* note 286, at § V.

²⁹⁴ The reform measures for the Volkswagen/Audi Defendants are different from those applicable to the Porsche Defendants. *Compare id.* § V (Injunctive Relief for the VW Defendants), *with id.* § VI (Injunctive Relief for the Porsche Defendants).

²⁹⁵ *Id.* at para. 13.

²⁹⁶ *Id.* at para. 14.

in-use testing using a portable emissions measurement system (“PEMS”), some of which must be conducted by an independent third party.²⁹⁷ Cultural changes include implementing of system of internal controls, new whistleblower protections, conducting internal audits and employee surveys, and implementing a new code of conduct with corresponding employee training.²⁹⁸ The companies must also conduct an annual Environmental Management Systems (“EMS”) audit that will now include compliance with U.S environmental laws.²⁹⁹

The Consent Decree also includes both reporting and third party auditor accountability measures to help ensure that Volkswagen complies with the Consent Decree-imposed reforms. In general, Volkswagen is required to implement the injunctive plan for three years and submit annual reports to the U.S. Department of Justice.³⁰⁰ Reports must be certified under penalty of perjury.³⁰¹

In addition, Volkswagen is required to retain an independent compliance auditor to monitor compliance with the Consent Decree provisions.³⁰² The compliance auditor must be the same person as the criminal monitor under the criminal plea agreement.³⁰³ Volkswagen is required to cooperate fully with the auditor and must provide information and access to the auditor as requested to comply with his duties.³⁰⁴ The auditor will provide an annual report to DOJ with his findings and any recommendations for corrective actions.³⁰⁵ The Auditor is required to report promptly to DOJ if he has difficulty obtaining the access or information required to execute his duties under the Decree.³⁰⁶ Volkswagen is required to respond to the auditor’s findings and propose an action plan to implement any necessary corrective actions.³⁰⁷

Whereas the 2.0 Liter and 3.0 Liter Consent Decrees collectively received over 1,100 public comments, not a single public comment was

²⁹⁷ *Id.* at para. 15.

²⁹⁸ *See id.* at paras. 16-23.

²⁹⁹ *See id.* at paras. 24-25.

³⁰⁰ *Id.* at para. 47. Porsche is required to report semi-annually, but is not subject to oversight from the independent compliance auditor. *Id.* at para. 39.

³⁰¹ *Id.* at paras. 52-53.

³⁰² *Id.* at para. 27.

³⁰³ *Id.* at para. 27(d).

³⁰⁴ *Id.* at para. 28(b).

³⁰⁵ *Id.* at para. 28(c).

³⁰⁶ *Id.* at para. 28(b).

³⁰⁷ *Id.* at para. 29(a).

submitted for the penalty and injunctive relief consent decree. On April 13, 2017, the court entered the consent decree.³⁰⁸

d. Other Federal Civil Claims Resolved

The United States' civil CAA penalty in the Third Consent Decree was part of a number of coordinated federal resolutions. One of those settlements resolved civil fraud claims asserted by CBP against Volkswagen.³⁰⁹ The \$1.45 billion Volkswagen paid under the EPA settlement also resolved CBP's claims. Volkswagen allegedly violated customs laws by knowingly submitting materially false statements to CBP and omitting material information, over multiple years, with the intent of deceiving or misleading CBP concerning the admissibility of vehicles into the United States.³¹⁰ CBP enforces U.S. customs laws as well as numerous laws on behalf of other governmental agencies related to health, safety, and border security. Because Volkswagen fraudulently secured its COCs from EPA by failing to disclose the defeat devices at the time of importation, Volkswagen falsely represented to CBP that each of the nearly 580,000 imported vehicles complied with all applicable environmental laws, knowing those representations to be untrue.³¹¹

In a third simultaneous settlement, Volkswagen agreed to pay \$50 million in civil penalties for alleged violations of FIRREA.³¹² The Justice Department alleged that Volkswagen AG and Volkswagen Group of America, via the latter's subsidiary Volkswagen Credit, Inc., supported the sales and leasing of certain Volkswagen vehicles, including the defeat-device vehicles, by offering competitive financing terms. They allegedly did so by purchasing from dealers certain automobile retail installment contracts (i.e., loans) and leases entered into by customers that purchased or leased certain Volkswagen vehicles, as well as dealer

³⁰⁸ See Order Granting the United States' Motion for Entry of Third Partial Consent Decree, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. April 13, 2017), ECF No. 3155.

³⁰⁹ See Settlement Agreement between U.S. Customs and Border Protection and Volkswagen AG (Jan. 11, 2017), <https://www.justice.gov/opa/press-release/file/924411/download>. See also Press Release, *supra* note 287; Third Consent Decree, *supra* note 286, at para. 9.

³¹⁰ Settlement Agreement, *supra* note 309, at 3, 5-6.

³¹¹ *Id.* at 3-4.

³¹² See *id.* See also Press Release, *supra* note 287; Transcript of Proceedings at 31-32, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Jan. 20, 2017), ECF No. 2801 ("MR. VAN EATON: . . . [L]ast week we filed a third partial consent decree with the Court, It was part of a set of coordinated federal resolutions pertaining to all of the 2- and 3-liter vehicles; and as a total, the resolutions contain \$4.3 billion in penalties resolving civil and criminal claims, including claims of the U.S. Customs and Border Patrol and alleged violations of . . . FIRREA, all of which were resolved in separate agreements that we did not file before Your Honor.").

floorplan loans.³¹³ These financing arrangements were primarily collateralized by the vehicles underlying the loan and lease transactions.³¹⁴

e. State Environmental Penalties

Although Volkswagen had previously reached a resolution in June 2016 with many states over alleged violations of UDAP laws, all of the states had reserved claims for civil penalties based on violations of environmental laws. On March 30, 2017, Volkswagen filed notice with the MDL court that it had resolved the environmental claims of ten states.³¹⁵ Each of the states had elected, pursuant to § 177 of the CAA, to adopt and enforce California's vehicle emission standards.³¹⁶ Under the terms of the settlement agreement, Volkswagen agreed to pay these States \$157.5 million to resolve their environmental penalty claims.³¹⁷

On July 21, 2017, California filed its third partial consent decree with Volkswagen.³¹⁸ Volkswagen agreed to pay a civil penalty of \$93,813,500, and an additional \$60 million to cover California's incurred enforcement costs.³¹⁹ In addition, Volkswagen agreed to an injunctive relief program that required corporate reforms and a compliance plan similar to those agreed to in the United States' Third Partial Consent Decree.³²⁰

IV. CRIMINAL ENFORCEMENT

A. Introduction

While the civil case was progressing, a significant criminal investigation was also proceeding at rapid speed. Experienced attorneys from the DOJ Criminal Division, Environment and Natural Resources Division, and the U.S. Attorney's Office for the Eastern District of Michigan conducted an international investigation. This impressive,

³¹³ Settlement Agreement, *supra* note 309, at 1.

³¹⁴ *Id.*

³¹⁵ Volkswagen AG, Volkswagen Group of American, Inc., Audi AG, Audi of America, LLC and Volkswagen Group Chattanooga Operations LLC's Notice of Environmental Settlement with Certain States and Remand Stipulation, In re: Volkswagen "Clean Diesel" Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. Mar. 30, 2017), ECF No. 3114. The 10 states were: Connecticut, Delaware, Maine, Massachusetts, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. *Id.* at 2.

³¹⁶ *See id.* at 2 n.1.

³¹⁷ *Id.* Exhibit A para. 8(a).

³¹⁸ Third California Partial Consent Decree, California v. Volkswagen AG, No. 3:15-md-02672-CRB (N.D. Cal July 27, 2017), ECF No. 3487.

³¹⁹ *Id.* at paras. 9-10.

³²⁰ *Id.* §§ V-VI.

comprehensive, and detailed process ultimately led to a corporate guilty plea and individual indictments resulting in massive fines, corporate reforms, and for some, imprisonment.

B. Corporate Plea Agreement

On January 11, 2017, Volkswagen AG was charged with and agreed to plead guilty to three felony counts. The charges included participating in a conspiracy to defraud the United States and to violate the CAA by lying and misleading EPA about whether certain Volkswagen, Audi, and Porsche vehicles complied with U.S. emissions standards; obstruction of justice for destroying documents related to the scheme; and importation of the vehicles into the United States by means of false statements.³²¹

The DOJ press release on January 11, 2017 announced that Volkswagen has agreed to plead guilty to three criminal felony counts and pay a \$2.8 billion criminal penalty.³²² The charging documents and statement of facts filed with the court outlined Volkswagen actions starting in 2006, concluding that “[w]hen the co-conspirators realized they could not design a diesel engine that would both meet stricter NOx emissions standards and attract sufficient customer demand in the U.S. Market, they decided they would use a software function to cheat standard U.S. Emissions tests.”³²³ At a hearing on March 10, 2017, Volkswagen AG General Counsel Manfred Doess appeared in court on behalf of the company to enter the guilty plea.³²⁴ Newspapers reported that it was the first time the company had pleaded guilty to criminal conduct in any court in the world.³²⁵

At Volkswagen AG’s April 21, 2017 sentencing hearing, U.S. District Judge Sean Cox of the Eastern District of Michigan accepted the plea agreement, sentencing Volkswagen AG to pay a \$2.8 billion fine to the United States and to serve three years of probation.³²⁶ Under the terms of the plea agreement, Volkswagen AG agreed to fully cooperate in the United States’ ongoing investigation and prosecution of individuals

³²¹ Press Release, *supra* note 287.

³²² *Id.*

³²³ *Id.*

³²⁴ Nick Carey & David Shepardson, *Volkswagen Pleads Guilty in U.S. Court in Diesel Emissions Scandal*, REUTERS (Mar. 10, 2017), <https://www.reuters.com/article/us-volkswagen-emissions/volkswagen-pleads-guilty-in-u-s-court-in-diesel-emissions-scandal-idUSKBN16H1W4>.

³²⁵ *Id.*

³²⁶ Press Release, DOJ, Volkswagen AG Sentenced in Connection with Conspiracy to Cheat U.S. Emissions Tests (Apr. 21, 2017), <https://www.justice.gov/opa/pr/volkswagen-ag-sentenced-connection-conspiracy-cheat-us-emissions-tests>.

responsible for the crimes.³²⁷ In addition, former Deputy U.S. Attorney General Larry D. Thompson was selected to serve as an independent corporate compliance monitor to oversee Volkswagen during its three-year term of probation.³²⁸

C. Prosecution of Individuals

1. James Robert Liang – the “Leader of Diesel Competence”

On June 1, 2016, while the first civil settlements were still being negotiated in the MDL, James Robert Liang, a Volkswagen Engineer, was indicted under seal by a federal grand jury.³²⁹ Three months later, on September 9, 2016, Mr. Liang pleaded guilty for his role in a nearly 10-year conspiracy to defraud U.S. regulators and U.S. Volkswagen customers through the use of defeat device software designed to cheat U.S. emissions tests.³³⁰ Mr. Liang was the first Volkswagen employee to plead guilty in the “Dieselgate” investigation, and his plea agreement provided that he would cooperate with the United States in its ongoing investigation.³³¹

According to the plea agreement, Mr. Liang was a twenty-five year employee of Volkswagen AG, working in its diesel development department in Wolfsburg, Germany.³³² Mr. Liang admitted that beginning in about 2006, he and other Volkswagen engineers started to design a new diesel engine for sale in the United States.³³³ When they realized that they could not design a diesel engine that would meet the United States’ Tier 2 emissions standards, they designed and implemented software to recognize whether a vehicle was undergoing standard U.S. emissions testing on a dynamometer or being driven on the road for the purpose of cheating emissions tests.³³⁴ In May 2008, Mr. Liang moved to the United States to assist in the launch of Volkswagen’s “clean diesel” vehicles. While working at Volkswagen’s testing facility in Oxnard, California during that time, he held the title of “Leader of Diesel Competence.” On

³²⁷ *Id.*

³²⁸ Volkswagen Defendants’ Notice of Appointment of Independent Compliance Auditor, In re: Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab. Litig., No. 3:15-md-02672-CRB (N.D. Cal. May 10, 2017), ECF No. 3205.

³²⁹ Indictment, United States v. Liang, No. 2:16-cr-20394 (E. D. Mich. June 1, 2016), ECF No. 1.

³³⁰ Rule 11 Plea Agreement, United States v. Liang, No. 2:16-cr-20394 (E.D. Mich. Sept. 9, 2016), ECF No. 19.

³³¹ *Id.* at 9.

³³² *Id.* at 5.

³³³ *Id.*

³³⁴ *Id.*

August 25, 2017, Judge Cox sentenced Mr. Liang to forty months in federal prison, and two years of supervised release, a more stringent sentence than requested by federal prosecutors. Mr. Liang has appealed his sentence.

2. Volkswagen Executives and Employees in Germany Indicted in the U.S.

On January 11, 2017, the same day that Volkswagen AG announced the corporation would plead guilty, a federal grand jury in the Eastern District of Michigan returned an indictment charging six Volkswagen executives and employees for their roles in the nearly ten-year conspiracy.³³⁵ Heinz-Jakob Neusser, Jens Hadler, Richard Dorenkamp, Bernd Gottweiss, Oliver Schmidt, and Jürgen Peter, all from Germany, were each charged with one count of conspiracy to defraud the United States, defraud Volkswagen's customers in the United States, and violate the CAA by making false representations to regulators and the public about the ability of Volkswagen's supposedly "clean diesel" vehicles to comply with U.S. emissions requirements.³³⁶ The indictment also charged Dorenkamp, Neusser, Schmidt, and Peter with CAA violations and charged Neusser, Gottweiss, Schmidt, and Peter with wire fraud.³³⁷ Each of the six Volkswagen employees were located in Germany when indicted.³³⁸ "This wasn't simply the action of some faceless, multinational corporation" announced then-Deputy Attorney General Sally Yates, "[t]his conspiracy involved flesh-and-blood individuals who used their positions within Volkswagen to deceive both regulators and consumers."³³⁹

The investigation continued after the initial indictments. Another Volkswagen employee, former Audi manager Giovanni Pamio, was charged on July 6, 2017 with conspiracy to defraud the United States, wire fraud, and violation of the CAA.³⁴⁰ Mr. Pamio, an Italian citizen, was the former head of Thermodynamics within Audi's Diesel Engine Development Department in Neckarsulm, Germany, where he led a team

³³⁵ Press Release, *supra* note 287

³³⁶ *Id.*

³³⁷ *Id.*

³³⁸ Under the terms of the extradition treaty between the United States and Germany, neither country is bound to extradite its own nationals to the other country. Treaty Between the United States of America and the Federal Republic of Germany Concerning Extradition, Ger.-U.S., art. 7, June 20, 1978, 32 U.S.T. 1485.

³³⁹ Press Release, *supra* note 287.

³⁴⁰ Press Release, DOJ, Former Audi Manager Charged in Connection with Conspiracy to Cheat U.S. Emissions Test (July 6, 2017), <https://www.justice.gov/opa/pr/former-audi-manager-charged-connection-conspiracy-cheat-us-emissions-tests>.

of engineers responsible for designing emissions control systems. According to the complaint, after realizing that it was impossible to calibrate a diesel engine that would meet U.S. NOx emissions standards within design constraints imposed by other departments at the company, Mr. Pamio directed Audi engineers to design and implement software functions that would cheat U.S. emission tests.³⁴¹

3. *Oliver Schmidt – the “Face of Dieselgate”*

Oliver Schmidt was a senior manager at Volkswagen who headed the company’s U.S. engineering and environmental office (“EEO”) from 2012 through early 2015.³⁴² In this role, Mr. Schmidt interacted with U.S. regulatory authorities on a regular basis.³⁴³ One of his responsibilities was securing regulatory approval for Volkswagen vehicles to be sold in the United States.³⁴⁴ Mr. Schmidt left his position around February 2015 and returned to Germany to work for Heinz-Jakob Neusser, a senior Volkswagen executive who serves as a member of Volkswagen’s brand management board.³⁴⁵

In July 2015, when Volkswagen was under considerable pressure to obtain a COC to sell its model year 2016 diesel vehicles in the United States, Schmidt agreed to use his connections with U.S. regulators—the relationships he had cultivated during his time as the head of Volkswagen’s EEO office in Michigan—to persuade them to provide the necessary approvals.³⁴⁶ By this time, U.S. regulators were withholding approval pending Volkswagen’s responses about the high on-road emissions from Volkswagen’s diesel vehicles. On August 5, 2015, Mr. Schmidt flew from Germany to Michigan to meet with a high-level CARB official. Mr. Schmidt concealed the existence of the cheating software, instead providing bogus technical explanations.³⁴⁷ He repeated this fundamental deceit on August 7, 2015 in a telephone conversation with another senior CARB official, assuring that official that Volkswagen could fix the “irregularities” that explained the differential emissions.³⁴⁸ Having returned to Germany, Mr. Schmidt received an internal Volkswagen AG litigation hold notice on September 1, 2015, indicative

³⁴¹ *Id.*

³⁴² *See* Sentencing Memorandum of the United States as to Defendant Oliver Schmidt at 2, United States v. Schmidt, No. 2:16-cr-20394 (E.D. Mich. Nov. 29, 2017), ECF No. 111.

³⁴³ *Id.*

³⁴⁴ *Id.*

³⁴⁵ *Id.*

³⁴⁶ *Id.* at 3-4.

³⁴⁷ *Id.* at 4.

³⁴⁸ *Id.*

that Volkswagen AG was anticipating litigation.³⁴⁹ Following the receipt of the litigation hold, Mr. Schmidt deleted a number of relevant documents that were covered by the hold and that were relevant to the U.S. government's investigation.³⁵⁰

Over a year later, in December 2016, Mr. Schmidt travelled from Germany to Florida for a vacation.³⁵¹ Mr. Schmidt was arrested at Miami International Airport on January 7, 2017 as he prepared to leave the country and return to Germany.³⁵² He had been charged in a sealed criminal complaint which was unsealed on January 9, 2017 for his initial appearance before a federal magistrate judge in Florida.³⁵³ He was charged with conspiracy to defraud the United States, to commit wire fraud and to violate the CAA.³⁵⁴ Mr. Schmidt was subsequently transported to Detroit, where he pleaded not guilty to the charges.³⁵⁵ Government prosecutors argued that Mr. Schmidt was a severe flight risk and argued that he be detained pending trial.³⁵⁶ Judge Cox denied Mr. Schmidt's request to be released on bond and ordered that he be confined pending his trial date.³⁵⁷

On August 4, 2017, Mr. Schmidt pleaded guilty to one count of conspiracy to defraud the United States, to commit wire fraud, and to violate the CAA, and to one count of violating the CAA.³⁵⁸ Mr. Schmidt was later sentenced to a maximum seven years in prison and fined \$400,000.³⁵⁹ Prior to the December 6, 2017 sentencing hearing, Mr.

³⁴⁹ *Id.* at 5.

³⁵⁰ *Id.*

³⁵¹ Chris Isidore, *VW Exec Stuck in Jail 70 Days and Counting*, CNN MONEY (Mar. 17, 2017), <http://money.cnn.com/2017/03/17/news/companies/volkswagen-executive-denied-bail/index.html>.

³⁵² Press Release, DOJ, Volkswagen Executive Charged for Alleged Role in Conspiracy to Cheat U.S. Emissions Tests (Jan. 9, 2017), <https://www.justice.gov/opa/pr/volkswagen-executive-charged-alleged-role-conspiracy-cheat-us-emissions-tests>.

³⁵³ *Id.*

³⁵⁴ *Id.*

³⁵⁵ See Transcript of Arraignment on Second Superseding Indictment at 5, *United States v. Schmidt*, No. 2:16-cr-20394 (E.D. Mich. Mar. 20, 2017), ECF No. 53.

³⁵⁶ See Transcript of Detention Hearing at 37, 41, *United States v. Schmidt*, No. 2:16-cr-20394 (E.D. Mich. Mar. 20, 2017), ECF No. 75.

³⁵⁷ *Id.* at 46-47; Order Denying Defendant Schmidt's Motion for Revocation of Detention Order, *United States v. Schmidt*, No. 2:16-cr-20394 (E.D. Mich. Mar. 16, 2017), ECF No 73.

³⁵⁸ Press Release, DOJ, Volkswagen Senior Manager Sentenced to 84 Months in Prison for Role in Conspiracy to Cheat U.S. Emissions Tests (Dec. 6, 2017), <https://www.justice.gov/opa/pr/volkswagen-senior-manager-sentenced-84-months-prison-role-conspiracy-cheat-us-emissions-tests>.

³⁵⁹ *Id.*

Schmidt wrote a letter to Judge Cox accepting responsibility for his wrongdoing.³⁶⁰ In the letter, he wrote that:

Being arrested . . . in Miami by (eight) law enforcement officers and then being led to my wife in handcuffs was one of the most humiliating experiences of my life up until then. This humiliation was surpassed by the public shaming that followed. My mugshot became the face of Dieselgate worldwide.³⁶¹

V. IMPORTANCE OF THE CASE

The Volkswagen prosecution shook the automotive world, and drew global attention to CAA mobile source enforcement. The Department of Justice, through a highly integrated, coordinated process with a multitude of agencies, states, and private class action plaintiffs effectively resolved one of the largest environmental enforcement cases in the history of the United States in record time. Only one year elapsed from January 2016 when the United States filed its civil complaint, to January 2017 when the United States filed its third and final civil consent decree and a corporate criminal plea agreement with Volkswagen, and announced six individual criminal indictments of high-level Volkswagen executives. The relief obtained by the United States exceeds \$20 billion, and requires Volkswagen to undertake significant corporate reforms, overseen by an independent compliance monitor, to ensure this type of illegal activity does not recur.

This case is a classic example of intentional corporate noncompliance with known standards. Volkswagen knew that its diesel vehicles could not legally be sold or imported in the United States without the required EPA and CARB certifications. Volkswagen also knew that those vehicles could not be certified unless they met applicable emission standards, and that they were subject to testing for compliance with those standards. When Volkswagen could not technologically meet the standard in the desired timeframe, Volkswagen decided to cheat, engineering a complex system to deceive emissions testing. Because the illegal mechanisms were sophisticated and difficult to detect, involving computer code embedded in the ECM, Volkswagen ultimately calculated that cheating was worth the risk. When the violations finally came to light after Volkswagen's protracted cover-up, top level Volkswagen executives were replaced. New management quickly adopted a more professional

³⁶⁰ Ian Thibodeau, *VW Exec Gets Maximum Sentence, Fine for Dieselgate Role*, THE DETROIT NEWS (Dec. 6, 2017), <http://www.detroitnews.com/story/business/autos/foreign/2017/12/06/vw-dieselgate-executive-sentenced/108374880/>. Sentencing memorandum of Oliver Schmidt, Exhibit A, United States v. Schmidt, No. 2:16-cr-20394 (E.D. Mich. Nov. 29, 2017), ECF No 113.

³⁶¹ *Id.*

approach. Among other things, they recognized that the company's existing culture, development processes, and internal controls failed to prevent a massive fraud and had to be revised.

The first takeaway³⁶² from the Volkswagen scandal is that companies must be vigilant in setting, monitoring, and enforcing institutional controls. No company—not even the largest automaker in the world—is so big that it can evade the law, and that must be clear to every employee, every shareholder, and all of the senior leadership. The corporate culture must emphasize full compliance with the law from the top down, modeled by senior leaders and frequently reinforced. Whistleblowers, when they exist, must be protected and the company must respond immediately to their bona fide complaints and promptly direct company personnel to take corrective action. Employees at every level must be promptly disciplined when they violate company policy or the law. A robust, well-informed, and widely publicized Corporate Social Responsibility (“CSR”) program can play a significant role in both the preventive and responsive phases of an incident. The existence of a CSR program in an organization alone will not ensure that the corporate culture has embraced full compliance, but it makes a meaningful imprint upon the culture. Fully embracing a culture of compliance can only be achieved by intentional, diligent, and continuing efforts on the part of leaders at all levels of the organization. In its 2016 Sustainability Report, Volkswagen described in detail the measures it has introduced to address ethics and integrity deficits evidenced by the diesel crisis. The United States' enforcement actions ensure that these measures are not merely aspirational, because Volkswagen's corporate plea agreement and the Third Partial Consent Decree require their implementation.

Second, rapid enforcement action is critical when health, safety, or environmental harm are at stake. Such enforcement action may include civil or criminal cases against corporations or individuals. The federal government plays a critical leadership role in coordinating all parties who have a stake in a large enforcement matter because of its ability to influence the litigation and the related settlement negotiations. When the federal government asserts that influence, it maximizes the potential for an early resolution. The United States filed its civil complaint early when the MDL structure was still forming, allowing it to fully participate in the foundational discussions concerning the structure of the case, discovery protocols, and the case management framework.

³⁶² These points of emphasis are substantially derived from a lecture given by John Cruden to the annual conference of the International Bar Association in Sydney, Australia, in October 2017.

Third, a successful resolution of a large case with cross-cutting claims and a nation-wide impact such as the Volkswagen matter requires the combined, synergistic efforts of lawyers representing federal, state, and private interests. Lawyers in the MDL were pressing different claims for clients with differing priorities, but the cooperation among environmental and consumer protection experts yielded a set of comprehensive Volkswagen settlements.

Fourth, in large cases like the Volkswagen MDL, having a judge who proactively manages the case focuses the parties and brings about a timely resolution. Effective use of the manual for complex litigation, deploying a discovery-savvy magistrate judge to quickly resolve disputes, and the willingness to appoint a settlement master to engage with the parties significantly advances the litigation. Judge Breyer and Magistrate Judge Jacqueline Corley presided over the Volkswagen litigation as a cohesive team, pushing hard and early to create an effective case management structure that helped to streamline the MDL and ultimately to achieve a comprehensive set of settlements. Settlement Master Mueller and his team were instrumental in advancing the settlement discussions by enforcing difficult deadlines, keeping the parties aligned, and actively engaging to bridge gaps between the parties.

Fifth, when the government pursues an enforcement action, it should have a set of clearly defined goals, such as: (1) stopping any ongoing violations to protect the environment; (2) further protecting the environment by remedying (mitigating) harm from past violations;³⁶³ (3) requiring violators to achieve full compliance with the law by taking steps to prevent future violations; and (4) exacting an appropriate fine or penalty to both punish the violator and deter future violations, and to remove economic benefits obtained through noncompliance; and (5) keeping the public informed, to the greatest extent legally permissible. The Volkswagen enforcement action satisfies each of these goals. The criminal plea agreement provides for an independent monitor to ensure future compliance and the Third Partial Consent Decree requires substantial changes in Volkswagen's business operations to prevent future misconduct. The \$4.3 billion combined fines and penalties the United States negotiated with Volkswagen included the largest ever CAA civil penalty. Volkswagen funded a \$2.9 billion environmental mitigation trust to pay for NOx reduction projects nationwide, will invest \$2 billion in ZEV infrastructure improvements over ten years, and is spending up to \$11 billion to buy back the offending vehicles. Collectively, these

³⁶³ Where the violations cause harm to more than the environment, the additional harm should also be addressed. In the Volkswagen matter, consumers who purchased the illegal diesel vehicles were also harmed, and they were compensated for that harm.

measures will completely offset the environmental harm resulting from Volkswagen's misconduct. Each of the extensive civil consent decrees were subject to a formal public review and comment process and intense media scrutiny, and were reviewed and approved by a federal judge.

Volkswagen's Dieselgate scandal was a historic fraud on the United States that was met with a swift comprehensive enforcement action. The Court made a special point of recognizing the speed at which the negotiations had culminated in a settlement and the work of government enforcement officials and regulators in bringing about a swift resolution with regard to the vehicles. As the Court stated during the final approval hearing:

THE COURT: They devoted—"they." I mean the people at this table, but I also mean the Commissions, I mean the staffs, I mean the entire bureaucracy responded with a sense of urgency that this required, because we weren't talking about just one or two cases of some consumer item not operating properly. We were talking about roughly 500,000 vehicles which were on the road, which were polluting the atmosphere, and out of compliance with the requirements that had been instituted by these various agencies. So there was a real urgency here. And it went effectively beyond the consumers. It went to the general public, because the general public has been effected by this matter.

And so I want to just thank, and I can't express it in a more adequate way, but I want to thank the government, writ large, for being so responsive to a serious environmental concern. That's wonderful. That's what we want our government to do. And we want them to do it expeditiously, and we want them to do it fairly, and we want them to do it thoroughly. And they have done it in this case.³⁶⁴

³⁶⁴ Transcript of Proceedings, *supra* note 236, at 104.