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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

UNITED STATES OF AMERICA

No. 2:16-cr-20394

HON. SEAN F. COX

v.

VIO: 18 U.S.C. § 371
18 U.S.C. § 1343
42 U.S.C. § 7413(c)(2)(A)
18 U.S.C. § 2

D-2 RICHARD DORENKAMP,
D-3 HEINZ-JAKOB NEUSSER,
D-4 JENS HADLER,
D-5 BERND GOTTWEIS,
D-6 OLIVER SCHMIDT, and
D-7 JÜRGEN PETER,

Defendants.

_____ /

SECOND SUPERSEDING INDICTMENT

THE GRAND JURY CHARGES:

GENERAL ALLEGATIONS

At all times relevant to this Indictment:

1. The purpose of the Clean Air Act and its implementing regulations was to protect human health and the environment by, among other things, reducing emissions of pollutants from new motor vehicles, including nitrogen oxides (“NOx”).

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2. The Clean Air Act required the U.S. Environmental Protection Agency (“EPA”) to promulgate emissions standards for new motor vehicles. The EPA established standards and test procedures for light-duty motor vehicles, including emission standards for NO_x.

3. The Clean Air Act prohibited manufacturers of new motor vehicles from selling, offering for sale, introducing or delivering for introduction into commerce, or importing (or causing the foregoing with respect to) any new motor vehicle unless the vehicle or engine complied with emissions standards, including NO_x emissions standards, and was issued an EPA certificate of conformity as required by the Clean Air Act and federal regulations implementing the Clean Air Act.

4. To obtain a certificate of conformity, a manufacturer was required to submit an application to the EPA for each model year and for each test group of vehicles that it intended to sell in the United States. The application was required to be in writing, to be signed by an authorized representative of the manufacturer, and to include, among other things, the results of testing done pursuant to the published Federal Test Procedures that measure NO_x emissions, and a description of the engine, emissions control system, and fuel system components, including a

detailed description of each Auxiliary Emission Control Device (“AECD”) to be installed on the vehicle.

5. An AECD was defined as “any element of design which senses temperature, vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system.” The manufacturer was also required to include a justification for each AECD. If the EPA, in reviewing the application for a certificate of conformity, determined that the AECD “reduced the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use,” and that (1) it was not substantially included in the Federal Test Procedure, (2) the need for the AECD was not justified for protection of the vehicle against damage or accident, or (3) it went beyond the requirements of engine starting, the AECD was considered a “defeat device.”

6. The EPA would not certify motor vehicles equipped with defeat devices. Manufacturers could not sell motor vehicles in the United States without a certificate of conformity from the EPA.

7. The California Air Resources Board (“CARB”) (together with the EPA, “U.S. regulators”) issued its own certificates, called executive orders, for the

sale of motor vehicles in the State of California. To obtain such a certificate, the manufacturer was required to satisfy the standards set forth by the State of California, which were equal to or more stringent than those of the EPA.

8. As part of the application for a certification process, manufacturers often worked in parallel with the EPA and CARB. To obtain a certificate of conformity from the EPA, manufacturers were also required to demonstrate that the light-duty vehicles were equipped with an on-board diagnostic (“OBD”) system capable of monitoring all emissions-related systems or components. Manufacturers could demonstrate compliance with California OBD standards in order to meet federal requirements. CARB reviewed applications from manufacturers to determine whether their OBD systems were in compliance with California OBD standards, and CARB’s conclusion would be included in the application the manufacturer submitted to the EPA.

9. In 1998, the United States established new federal emissions standards that would be implemented in separate steps, or Tiers. Tier II emissions standards, including for NOx emissions, were significantly stricter than Tier I. For light-duty vehicles, the regulations required manufacturers to begin to phase in compliance with the new, stricter Tier II NOx emissions standards in 2004 and required manufacturers to fully comply with the stricter standards for model year 2007.

Relevant Companies

10. Volkswagen AG (“VW AG”) was a motor vehicle manufacturer based in Wolfsburg, Germany.

11. Audi AG (“Audi”) was a motor vehicle manufacturer based in Ingolstadt, Germany and a subsidiary approximately 99% owned by VW AG.

12. Volkswagen Group of America, Inc. (“VW GOA”) was a wholly-owned subsidiary of VW AG based in Herndon, Virginia.

13. VW AG, Audi AG, and VW GOA are collectively referred to herein as “VW.”

14. “VW Brand” was an operational unit of VW AG that developed vehicles to be sold under the “Volkswagen” brand name. VW Brand had its own Management Board.

15. Company A was an automotive engineering company based in Berlin, Germany, which specialized in software, electronics, and technology support for vehicle manufacturers. VW AG owned fifty percent of Company A’s shares and was Company A’s largest customer.

VW Diesel Vehicles Sold in the United States

16. VW sold, offered for sale, introduced into commerce, delivered for introduction into commerce, imported into the United States, or caused the

foregoing actions (collectively, “sold in the United States”) the following vehicles containing 2.0 liter diesel engines (“2.0 Liter Subject Vehicles”):

- a. Model Year (“MY”) 2009-2015 VW Jetta;
- b. MY 2009-2014 VW Jetta Sportwagen;
- c. MY 2010-2015 VW Golf;
- d. MY 2015 VW Golf Sportwagen;
- e. MY 2010-2013 Audi A3, MY 2015 Audi A3;
- f. MY 2013-2015 VW Beetle and VW Beetle Convertible; and
- g. MY 2012-2015 VW Passat.

17. VW sold in the United States the following vehicles containing 3.0 liter diesel engines (“3.0 Liter Subject Vehicles”):

- a. MY 2009-2016 VW Touareg;
- b. MY 2009-2015 Audi Q7;
- c. MY 2014-2016 Audi A6 Quattro;
- d. MY 2014-2016 Audi A7 Quattro;
- e. MY 2014-2016 Audi A8L; and
- f. MY 2014-2016 Audi Q5.

18. VW GOA’s Engineering and Environmental Office (“EEO”) was located in Auburn Hills, Michigan, in the Eastern District of Michigan. Among

other things, EEO prepared and submitted applications (the “Applications”) for a certificate of conformity and an executive order (collectively, “Certificates”) to the EPA and CARB to obtain authorization to sell each of the 2.0 Liter Subject Vehicles and 3.0 Liter Subject Vehicles (collectively, the “Subject Vehicles”) in the United States. VW GOA’s Test Center California performed testing related to the Subject Vehicles.

19. VW AG developed the engines for the 2.0 Liter Subject Vehicles. Audi AG developed the engines for the 3.0 Liter Subject Vehicles and the MY 2013-2016 Porsche Cayenne diesel vehicles sold in the United States (the “Porsche Vehicles”).

20. The Applications to the EPA were accompanied by the following signed statement by a VW representative:

The Volkswagen Group states that any element of design, system, or emission control device installed on or incorporated in the Volkswagen Group’s new motor vehicles or new motor vehicle engines for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group’s information and belief, cause the emission into the ambient air of pollutants in the operation of its motor vehicles or motor vehicle engines which cause or contribute to an unreasonable risk to public health or welfare except as specifically permitted by the standards prescribed under section 202 of the Clean Air Act. The Volkswagen Group further states that any element of design, system, or emission control device installed or incorporated in the Volkswagen Group’s new motor vehicles or new motor

vehicle engines, for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group's information and belief, cause or contribute to an unreasonable risk to public safety.

...

All vehicles have been tested in accordance with good engineering practice to ascertain that such test vehicles meet the requirement of this section for the useful life of the vehicle.

21. Based on the representations made by VW employees in the Applications for the Subject Vehicles, EPA and CARB issued Certificates for these vehicles, allowing the Subject Vehicles to be sold in the United States.

22. VW represented to its U.S. customers, U.S. dealers, U.S. regulators and others that the Subject Vehicles met the new and stricter U.S. emissions standards identified in paragraph 9 above. Further, VW designed a specific marketing campaign to market these vehicles to U.S. customers as "clean diesel" vehicles.

The Defendants

23. From in or about 2003 until in or about December 2012, defendant RICHARD DORENKAMP worked for VW AG as the head of VW's Engine Development After-Treatment Department in Wolfsburg, Germany. From in or about 2006 until in or about December 2012, DORENKAMP led a team of engineers that developed the diesel engine (the "EA 189" engine) that was

designed to meet the new, tougher emissions standards for diesel vehicles in the United States.

24. From in or about July 2013 until in or about September 2015, defendant HEINZ-JAKOB NEUSSER worked for VW AG as the head of Development for VW Brand, sat on the management board for VW Brand, and also served as head of Engine Development for all of VW AG. From in or about October 2011, when he joined VW from Porsche, until in or about July 2013, NEUSSER served as the head of the VW Brand Engine Development department. In his capacity as head of Development for VW Brand, NEUSSER supervised a group of approximately 10,000 VW AG employees.

25. From in or about May 2007 until in or about March 2011, defendant JENS HADLER worked for VW AG as the head of the VW Brand Engine Development department. Before serving as head of Engine Development, HADLER held various positions within VW AG, including as head of Diesel Engine Development for VW from in or about 2003 until in or about October 2006.

26. From in or about 2007 until in or about October 2014, defendant BERND GOTTWEIS was a supervisor with responsibility for VW AG's Quality Management and Product Safety department who reported to the head of Quality

Management. Before serving in that position, GOTTWEIS held various positions within VW AG.

27. From in or about 2012 through in or about February 2015, defendant OLIVER SCHMIDT was the General Manager in charge of EEO, located in Auburn Hills, Michigan. From in or about March 2015 through in or about September 2015, SCHMIDT returned to VW AG headquarters in Wolfsburg, Germany, to work as a principal deputy to NEUSSER in NEUSSER'S capacity as head of Engine Development for all of VW AG.

28. From in or about 1990 until present, defendant JÜRGEN PETER worked for VW AG in the certification group. Between about March 2015 and about July 2015, Peter was one of the VW AG liaisons between the regulatory agencies and VW AG.

COUNT 1

**(18 U.S.C. § 371 – Conspiracy to Defraud the United States,
to Commit Wire Fraud, and to Violate the Clean Air Act)**

D-2 RICHARD DORENKAMP

D-3 HEINZ-JAKOB NEUSSER

D-4 JENS HADLER

D-5 BERND GOTTWEIS

D-6 OLIVER SCHMIDT

D-7 JÜRGEN PETER

29. Paragraphs 1 through 28 of this Second Superseding Indictment are realleged and incorporated by reference as though fully set forth herein.

30. From at least in or about May 2006 and continuing through at least November 2015, in Oakland County, within the Eastern District of Michigan, and elsewhere, defendants RICHARD DORENKAMP, HEINZ-JAKOB NEUSSER, JENS HADLER, BERND GOTTWEIS, OLIVER SCHMIDT, JÜRGEN PETER, and others, known and unknown to the Grand Jury, did knowingly, intentionally, and willfully combine, conspire, and confederate and did agree to:

- a. defraud the United States by impairing, impeding, obstructing, and defeating a lawful function of the federal government, that is, the U.S. EPA's function of implementing and enforcing emissions standards for air pollutants for new motor vehicles under the Clean Air Act, by deceitful or dishonest means, in violation of 18 U.S.C. § 371;

- b. commit wire fraud, that is, knowingly, willfully, and with the intent to defraud, having devised and intending to devise a scheme and artifice to defraud and to obtain money and property by means of materially false and fraudulent pretenses, representations, and promises, transmit and cause to be transmitted by means of wire, radio, and television communication, writings, signs, signals, pictures, and sounds in interstate and foreign commerce for the purpose of executing such scheme and artifice in violation of 18 U.S.C. § 1343; and
- c. violate the Clean Air Act, by making and causing to be made, false material statements, representations, and certifications in, and omitting and causing to be omitted material information from, notices, applications, records, reports, plans, and other documents required pursuant to the Clean Air Act to be filed or maintained, in violation of 42 U.S.C. § 7413(c)(2)(A).

The Purpose of the Conspiracy

31. The purpose of the conspiracy was for DORENKAMP, NEUSSER, HADLER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators to unlawfully enrich VW and themselves by, among other things, (a) deceiving U.S. regulators in order to obtain the necessary Certificates to sell diesel vehicles in the

United States; (b) selling VW diesel vehicles to U.S. customers knowing that those vehicles were intentionally designed to detect, evade and defeat U.S. emissions standards; (c) deceiving U.S. customers by marketing VW diesel motor vehicles as “clean diesel” and otherwise environmentally-friendly; and (d) concealing VW’s intentional emissions cheating from U.S. regulators, U.S. customers, and the U.S. public.

The Conspiracy

32. From at least in or about May 2006 until in or about November 2015, DORENKAMP, NEUSSER, HADLER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators agreed to defraud U.S. regulators and U.S. customers, and violate the Clean Air Act, by misleading U.S. regulators and U.S. customers about whether the Subject Vehicles and the Porsche Vehicles complied with U.S. emissions standards. During their involvement with the design, marketing and sale of the Subject Vehicles and the Porsche Vehicles in the United States, DORENKAMP, NEUSSER, HADLER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators: (a) knew that the Subject Vehicles and the Porsche Vehicles did not meet U.S. emissions standards; (b) knew that VW was using software to cheat the U.S. testing process by making it appear as if the Subject Vehicles and the Porsche Vehicles met U.S. emissions standards when, in fact, they did not; and

(c) attempted to and did conceal these facts from U.S. regulators and U.S. customers.

The Origin and Implementation of the 2.0 Liter Defeat Device

33. In or about at least 2006, VW employees working under the supervision of DORENKAMP and HADLER were designing the new EA 189 2.0 liter diesel engine (later known as the Generation 1 or “Gen 1”) that would be the cornerstone of a new project to sell passenger diesel vehicles in the United States. Selling diesel vehicles in the U.S. market was an important strategic goal of VW AG. This project became known within VW as the “US’07” project.

34. DORENKAMP, HADLER, and their co-conspirators, however, realized that they could not design a diesel engine that would both meet the stricter NOx emissions standards that would become effective in 2007 and attract sufficient customer demand in the U.S. market. Instead of bringing to market a diesel vehicle that could legitimately meet the new, more restrictive U.S. NOx emissions standards, VW employees acting at the direction of DORENKAMP, HADLER, and their co-conspirators, designed, created, and implemented a software function (the “defeat device”) to cheat the standard U.S. emissions tests. DORENKAMP, HADLER, and their co-conspirators referred to the software as,

among other things, the “acoustic function,” “switch logic,” “cycle beating,” or “emissions-tight mode.”

35. While employees acting at their direction designed and implemented the defeat device software, DORENKAMP, HADLER, and their co-conspirators knew that U.S. regulators would measure VW’s diesel vehicles’ emissions through standard tests with specific, published drive cycles. VW employees acting at the direction of DORENKAMP, HADLER, and their co-conspirators designed the VW defeat device to recognize whether the vehicle was undergoing standard U.S. emissions testing on a dynamometer (or “dyno”) or whether the vehicle was being driven on the road under normal driving conditions. The defeat device accomplished this by recognizing the standard drive cycles used by U.S. regulators. If the vehicle’s software detected that it was being tested, the vehicle performed in one mode, which satisfied U.S. NOx emissions standards. If the vehicle’s software detected that the vehicle was not being tested, it operated in a different mode, in which the effectiveness of the vehicle’s emissions control systems was reduced substantially, causing the vehicle to emit substantially higher NOx, sometimes 35 times higher than allowable U.S. standards.

36. Throughout in or around 2006, DORENKAMP authorized VW engineers to use the defeat device in the development of the US ’07 project, despite

concerns expressed by certain VW AG employees about the propriety of designing and activating the defeat device software.

37. Throughout 2007, various technical problems arose with the US'07 project that led to internal discussions and disagreements among members of the team that was primarily responsible for ensuring vehicles met U.S. emissions standards. Those disagreements over the direction of the project were expressly articulated during a contentious meeting on or about October 5, 2007, over which HADLER presided. As a result of the meeting, HADLER authorized DORENKAMP to proceed with the US'07 project despite knowing that only the use of the defeat device software would enable VW diesel vehicles to pass U.S. emissions tests.

The 3.0 Liter Defeat Device

38. Starting in or around 2006, Audi engineers designed a 3.0 liter diesel engine for the U.S. market. The 3.0 liter engine was more powerful than the 2.0 liter engine, and was included in larger and higher-end model vehicles. The 3.0 liter engine was ultimately installed in various Volkswagen, Audi and Porsche diesel vehicles sold in the United States for model years 2009 through 2016. Like their VW counterparts, in order to pass U.S. emissions tests, Audi engineers

designed and installed software designed to detect, evade, and defeat U.S. emissions standards.

39. Specifically, Audi engineers calibrated a defeat device for the 3.0 Liter Subject Vehicles that varied injection levels of a solution consisting of urea and water (“AdBlue”) into the exhaust gas system based on whether the vehicle was being tested or not, with substantially less NOx reduction occurring during regular driving conditions. In this way, the vehicle consumed less AdBlue, and avoided a corresponding increase in the vehicle’s AdBlue tank size, which would have decreased the vehicle’s trunk size and made the vehicle less marketable in the United States. In addition, the vehicle could drive further between service intervals, which was also perceived as important to the vehicle’s marketability in the United States.

Certification of VW Diesel Vehicles in the United States

40. As part of the certification process for each new model year, DORENKAMP, NEUSSER, HADLER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators falsely and fraudulently certified, and/or caused to be certified, to the EPA and CARB that the Subject Vehicles met U.S. emissions standards and complied with standards prescribed by the Clean Air Act. DORENKAMP, NEUSSER, HADLER, GOTTWEIS, SCHMIDT, PETER, and

their co-conspirators knew that if they had told the truth and disclosed the existence of the defeat device, VW would not have obtained the requisite Certificates for the Subject Vehicles and could not have sold any of them in the United States.

Marketing of “Clean Diesel” Vehicles

41. Having obtained the necessary EPA and CARB Certificates, DORENKAMP, NEUSSER, HADLER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators marketed, and/or caused to be marketed, the Subject Vehicles to the U.S. public as “clean diesel” and environmentally-friendly, when they knew that these representations made to U.S. customers were false, that the Subject Vehicles were not “clean,” that the Subject Vehicles were intentionally designed to detect, evade, and defeat U.S. emissions standards, and that the Subject Vehicles were polluting the environment with NOx emissions well above U.S. emission limits.

The Perfection of the 2.0 Liter Defeat Device

42. Following the launch of the Gen 1 2.0 Liter Subject Vehicles in the United States, DORENKAMP, HADLER, and their co-conspirators worked on a second generation of the diesel engine (the “Gen 2”), which also contained software designed to detect, evade, and defeat U.S. emissions tests. The Gen 2 2.0

Liter Subject Vehicles were launched in the United States starting in or around 2011.

43. In or around 2012, hardware failures developed in certain of the 2.0 Liter Subject Vehicles that were being used by customers on the road in the United States. VW engineers hypothesized that vehicles equipped with the defeat device stayed in “dyno” mode (*i.e.*, testing mode) even when driven on the road outside of test conditions. Since the 2.0 Liter Subject Vehicles were not designed to be driven for long periods of time in “dyno” mode, or, in other words, in an emissions-compliant manner, VW engineers suspected that the increased stress on the exhaust system from being driven too long in “dyno” mode could be the root cause of the hardware failures.

44. In or around July 2012, engineers from the VW Brand Engine Development department met, in separate meetings, with GOTTWEIS and NEUSSER to explain that they suspected the cause of the hardware failures in the Subject Vehicles was the increased stress on the exhaust system from being driven too long in “dyno” mode as a result of the use of software designed to detect, evade, and defeat U.S. emission tests. To illustrate the software’s function, the engineers used a document. Although GOTTWEIS and NEUSSER understood the purpose and significance of the software, they each encouraged further

concealment of the software. Specifically, GOTTWEIS and NEUSSER each instructed the engineers who presented the issue to them to destroy the document used to illustrate the operation of the cheating software.

45. VW engineers, having informed GOTTWEIS and NEUSSER of the existence and purpose of the defeat device in the 2.0 Liter Subject Vehicles, then sought ways to improve its operation in existing 2.0 Liter Subject Vehicles to avoid the hardware failures. To solve the hardware failures, VW engineers decided to start the 2.0 Liter Subject Vehicles in the “street mode” and, when the defeat device recognized that the vehicle was being tested, switch to the “dyno mode.” To increase the likelihood that the software in fact recognized that the vehicle was being tested on the dynamometer, the VW engineers activated a “steering wheel angle recognition” feature. The steering wheel angle recognition interacted with the software by enabling the vehicle to detect whether it was being tested on a dynamometer (where the steering wheel is not turned), or being driven on the road. By making these alterations to the operation of the defeat device, the conspirators ensured that the 2.0 Liter Subject Vehicles would almost never be driven on the road in an emissions-compliant manner.

46. Certain VW employees again expressed concern, specifically about the expansion of the defeat device through the steering wheel angle detection, and

sought approval for the function from more senior managers. In particular, VW AG engineers asked NEUSSER for a decision on whether or not to use the proposed function. In or about April 2013, NEUSSER authorized activation of the software underlying the steering wheel angle recognition function. VW employees then installed the new software function in new 2.0 Liter Subject Vehicles being sold in the United States, and later installed it in existing 2.0 Liter Subject Vehicles through software updates during routine vehicle maintenance.

47. NEUSSER and other co-conspirators falsely and fraudulently represented, and/or caused others to represent, to U.S. regulators, U.S. customers and others that the software update in or around 2014 was intended to improve the 2.0 Liter Subject Vehicles when, in fact, the defendants and other co-conspirators knew that the update used the steering wheel angle of the vehicle as a basis to better detect when the vehicle was undergoing emissions tests, thereby improving the defeat device's precision in order to reduce the stress on the exhaust system.

The Concealment of the Defeat Devices

48. In or around March 2014, certain VW employees, including NEUSSER, GOTTWEIS, SCHMIDT, and PETER learned of the results of a study undertaken by West Virginia University's Center for Alternative Fuels, Engines and Emissions and commissioned by the International Council on Clean

Transportation (the "ICCT study"). The ICCT study identified substantial discrepancies in the NOx emissions from certain 2.0 Liter Subject Vehicles when tested on the road compared to when these vehicles were undergoing EPA and CARB standard drive cycle tests on a dynamometer. The results of the study showed that two of the three vehicles tested on the road, both 2.0 Liter Subject Vehicles, emitted NOx at values of up to 35 times the permissible limit applicable during testing in the United States.

49. Following the ICCT study, CARB, in coordination with the EPA, attempted to work with VW to determine the cause for the higher NOx emissions in 2.0 Liter Subject Vehicles when being driven on the road as opposed to on the dynamometer undergoing standard emissions test cycles. To do this, CARB, in coordination with the EPA, repeatedly asked VW questions that became increasingly more specific and detailed, as well as conducted additional testing themselves.

50. In response to learning the results of the ICCT study, engineers in the VW Brand Engine Development department formed an ad hoc task force to formulate responses to questions that arose from the U.S. regulators. VW AG employees, including NEUSSER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators, determined not to disclose to U.S. regulators that the tested vehicle

models operated with a defeat device. Instead, NEUSSER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators pursued a strategy of concealing the defeat device in responding to questions from U.S. regulators, while appearing to cooperate.

51. Throughout 2014 and the first half of 2015, NEUSSER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators, continued to offer, and cause to be offered, software and hardware “fixes” and explanations to U.S. regulators for the 2.0 Liter Subject Vehicles’ higher NOx measurements on the road without revealing the underlying reason – the existence of software designed to detect, evade and defeat U.S. emissions tests.

52. When U.S. regulators threatened not to certify VW model year 2016 vehicles for sale in the United States, VW AG supervisors requested a briefing on the situation in the United States. On or about July 27, 2015, VW employees, including SCHMIDT, presented to VW AG executive management. NEUSSER was present, among others.

53. On or about August 5, 2015, in a meeting in Traverse City, Michigan, SCHMIDT and another VW employee met with a CARB official to discuss again the discrepancies in emissions of the 2.0 Liter Subject Vehicles. SCHMIDT attempted to and did mislead and deceive CARB by offering technical reasons and

excuses such as “irregularities” or “abnormalities” for the discrepancy without revealing the fundamental reason for the higher NOx measurements on the road: software intentionally installed in VW vehicles to detect, evade, and defeat U.S. emissions testing.

54. On or about August 18, 2015, NEUSSER and other co-conspirators approved a script to be followed by VW AG employees during an upcoming meeting with CARB on or about August 19, 2015. The script provided for continued concealment of the defeat device from CARB in the 2.0 Liter Subject Vehicles, with the goal of obtaining approval to sell the model year 2016 2.0 Liter Subject Vehicles in the United States.

55. On or about August 19, 2015, in a meeting with CARB in El Monte, California, a VW employee explained, for the first time to U.S. regulators and in direct contravention of instructions from management at VW AG, that certain of the 2.0 Liter Subject Vehicles used different emissions treatment depending on whether the vehicles were on the dynamometer or the road, thereby signaling that VW had cheated on U.S. emissions tests.

56. On or about September 3, 2015, in a meeting in El Monte, California with CARB and EPA, a VW executive formally admitted that VW had installed a defeat device in the 2.0 Liter Subject Vehicles.

57. As a result of the conspiracy, DORENKAMP, NEUSSER, HADLER, GOTTWEIS, SCHMIDT, PETER, and their co-conspirators caused defeat device software to be installed on all of the approximately 585,000 Subject Vehicles and Porsche Vehicles sold in the United States from 2009 through 2015.

Overt Acts

58. In or about 2006 and 2007, DORENKAMP and his co-conspirators took the necessary actions to develop and design the defeat device software that was specifically designed to recognize U.S. emissions tests, and to cheat such tests.

59. On or about November 10, 2006, an employee of Company A submitted a request, on behalf of Volkswagen, for a software design change to what was known as the “acoustic function” that would become the defeat device.

60. On or about March 19, 2007, DORENKAMP, his co-conspirators, and other VW employees, met with representatives of the EPA in Ann Arbor, Michigan. During the meeting, DORENKAMP and other VW employees described, among other things, the AECDS associated with VW’s EA 189 diesel engine. VW, through DORENKAMP and others, presented an overview of the engine design and proposed operation of the emission control systems.

Throughout the meeting, DORENKAMP and other VW employees knew they

planned to include a defeat device in the EA 189 diesel engine but concealed the existence of the defeat device from the EPA.

61. On or about March 21, 2007, DORENKAMP, his co-conspirators and other VW employees met with CARB officials in El Monte, California. CARB had requested that VW specifically discuss the AECDS associated with the emissions control systems in the EA 189 diesel engine design. Throughout the meeting, DORENKAMP and other VW employees knew they planned to include a defeat device in the EA 189 diesel engine but concealed the existence of the defeat device from CARB.

62. In the fall of 2007, DORENKAMP participated in a meeting with HADLER and others, during which DORENKAMP argued for continuation of the EA 189 towards production, even while some of his colleagues were against it. HADLER approved the continued development of the EA 189 with the defeat device following the meeting.

63. On or about October 12, 2007, following the meeting referenced in Paragraph 62 above, drafts of slide presentations were exchanged with HADLER, DORENKAMP, and others in preparation for a senior executive technical meeting at which HADLER would be presenting on the project's status. Included in the presentation were back-up slides, two of which contained explicit and repeated

references to software changes describing the defeat device through engineering terms, including “precon recognition,” and “emissions tight mode.” On or around October 13, 2007, HADLER provided substantive edits to the PowerPoint presentation.

64. On or about October 17, 2007, another version of a backup slide containing software changes that made numerous references to explicit engineering terms for the defeat device was exchanged with HADLER, DORENKAMP, and others. In response, on or about the same date, HADLER wrote (in German) that “we shall please never present this anywhere and will also not distribute it.”

65. On or about November 18, 2007, HADLER sent an email to DORENKAMP and others attaching three photos of himself with California’s then-Governor, which were taken during an event at which HADLER promoted the 2.0 Liter Subject Vehicles in the United States as “green diesel.”

66. On or about April 8, 2008, DORENKAMP, HADLER, and their co-conspirators caused a VW GOA employee to submit the Application for Certification for the Model Year 2009 VW Jetta and Jetta Sportwagen vehicles.

67. Starting on or about July 1, 2008, defendants marketed and sold in the U.S. the Subject Vehicles containing the new “clean diesel” engine, which, in fact,

contained the defeat device. A marketing vehicle was painted with green vines and the words “Jetta TDI Clean Diesel” and “goodcleandieselfun.com.”

68. On or about December 22, 2011, DORENKAMP and his co-conspirators caused a VW GOA employee to submit the final Application to EPA for Certification for the Model Year 2011 VW Jetta, Jetta Sportwagen, Golf and Audi A3 vehicles.

69. On or about December 20, 2012, DORENKAMP, NEUSSER and their co-conspirators caused a VW GOA employee to submit the final Application to EPA for Certification for the Model Year 2012 Passat vehicles.

70. On or about February 18, 2013, a VW AG employee sent an email to his supervisor, attaching a PowerPoint presentation that described the proposed extension of the “acoustic function” to include the steering wheel angle recognition feature. In the email, the VW AG employee informed his supervisor that this proposal would be presented to NEUSSER.

71. On or about October 31, 2013, NEUSSER and his co-conspirators caused a VW GOA employee to submit the final Application to EPA for Certification for the Model Year 2013 VW Jetta, Jetta Sportwagen, Golf and Beetle, and Beetle Convertible vehicles.

72. On or about April 15, 2014, SCHMIDT forwarded GOTTWEIS a copy of the ICCT presentation, and an email chain in which a VW employee stated, “[s]ome presenters indicated that they suspected cheating, where the vehicle recognizes it is an [sic] a dyno and runs different calibration that [sic] what it runs in actual driving. We will have to be careful with this going forward.” In his cover email, SCHMIDT concluded with, “Within VW GOA, the study is known only to EEO, and we want to keep it that way for the time being.”

73. On or about April 28, 2014, members of the VW task force presented the findings of the ICCT study to GOTTWEIS, whose managerial responsibility included addressing safety and quality problems in vehicles in production.

74. On or about May 9, 2014, SCHMIDT sent an email to a VW employee, stating “Are you crazy? Recall the email,” in response to the VW employee’s original email that read: “As mentioned orally, VW currently in [North American Region] has the problem of high off cycle emissions, that the EPA has now found out about and we must respond. Oliver Schmidt as head of EEO plans to speak directly with [a VW supervisor] here in Herndon at the end of May. I cannot tell you anything before that because the investigations are still underway in [Wolfsburg]. Dr. Neusser is directly involved in it as head of development.”

75. On or about May 22, 2014, GOTTWEIS sent a VW AG executive a memorandum describing a timeline of events with CARB after the ICCT study. GOTTWEIS stated that a full explanation could not be provided to authorities and it could be assumed that the authorities would test the vehicles for defeat devices. GOTTWEIS stated that even new software would not be able to make the cars fully compliant.

76. On or about October 1, 2014, VW employees presented to CARB regarding the ICCT study results and discrepancies identified in NOx emissions between dynamometer testing and road driving. In responding to questions, VW employees did not reveal that the existence of the defeat device was the explanation for the discrepancies in NOx emissions, and, in fact, gave CARB false reasons for the discrepancies in NOx emissions including driving patterns and technical issues.

77. On or about December 15, 2014, NEUSSER and his co-conspirators caused a VW GOA employee to submit the final Applications to EPA for Certification for the Model Year 2014 Passat vehicles and Model Year 2014 Jetta, Jetta Sportwagen, Golf, Beetle, and Beetle Convertible vehicles.

78. On or about May 12, 2015, PETER sent an email to VW AG employees referencing on-road emissions measurements by CARB in mid-April

through June. PETER proposed possible misleading and false arguments to present to CARB as to why the vehicles were not passing the emissions tests on the road.

79. On or about June 23, 2015, PETER sent an email to VW AG employees reiterating that VW AG needed to come up with “good arguments” to counter the questions from the U.S. regulators.

80. On or about August 5, 2015, in a meeting in Traverse City, Michigan, SCHMIDT and a colleague met with a CARB employee to discuss the discrepancy in emissions of VW diesel vehicles. SCHMIDT offered technical reasons and excuses, such as “irregularities” or “abnormalities,” for the discrepancy without revealing the fundamental reason for the higher NOx measurements on the road: software intentionally installed in VW vehicles so the vehicles could detect and evade emissions testing.

81. On or about August 17, 2015, SCHMIDT wrote to a manager at VW that another manager had just “explained to me on the telephone why [another VW employee] should not come along [to a future CARB meeting] – so he would not have to consciously lie.”

82. On or about August 18, 2015, NEUSSER and his co-conspirators approved a script to be followed by VW employees during an upcoming meeting

with CARB in California on or about August 19, 2015. The script provided for continued concealment of the defeat device from CARB in the 2.0 Liter Subject Vehicles, with the goal of obtaining approval to sell the model year 2016 2.0 Liter Subject Vehicles in the United States.

All in violation of Title 18, United States Code, Section 371.

COUNTS 2 through 10
(42 U.S.C. § 7413(c)(2)(A) – Violation of the Clean Air Act)

D-2 RICHARD DORENKAMP
D-3 HEINZ-JAKOB NEUSSER
D-6 OLIVER SCHMIDT
D-7 JÜRGEN PETER

83. Paragraphs 1 through 28 of this Second Superseding Indictment are realleged and incorporated by reference as though fully set forth herein.

84. On multiple dates during the period from on or about July 2011 until on or about September 3, 2015, in Oakland County, within the Eastern District of Michigan, and elsewhere, defendants RICHARD DORENKAMP, HEINZ-JAKOB NEUSSER, OLIVER SCHMIDT, and JÜRGEN PETER did knowingly make and cause to be made, false material statements, representations, and certifications in, and omit and cause to be omitted material information from, notices, applications, records, reports, plans, and other documents required pursuant to the Clean Air Act to be filed or maintained, that is, in VW applications for Certificates for certain

diesel vehicles, DORENKAMP, NEUSSER, SCHMIDT, and PETER knowingly omitted, and caused to be omitted, the material fact of the installation of the defeat device on such vehicles from the applications and knowingly and falsely certified, and caused to be certified, that any element of design, system, or emission control installed on or incorporated in such vehicles would not cause the release of pollutants into the ambient air except as specifically permitted by the standards under the Clean Air Act, when, in fact, DORENKAMP, NEUSSER, SCHMIDT, and PETER well knew that defeat devices were installed on the vehicles and that the vehicles would release pollutants into the ambient air in violation of the standards set under the Clean Air Act when not in the testing mode because of the defeat devices.

| Count | Defendant(s) | Approximate Date | Description |
|--------------|---|-------------------------|--|
| 2 | D-2 RICHARD DORENKAMP | December 22, 2011 | Certificate of Conformity (COC) Application to EPA for MY 2011 Jetta, Jetta Sportwagen, Golf, Audi A3 (Test Group BVWXV02.0U5N) |
| 3 | D-2 RICHARD DORENKAMP D-3 HEINZ JAKOB- NEUSSER | December 20, 2012 | COC Application to EPA for MY 2012 Passat (Test Group CVWXV02.0U4S) |
| 4 | D-2 RICHARD DORENKAMP D-3 HEINZ JAKOB- NEUSSER | December 18, 2012 | COC Application to EPA for MY 2012 Jetta, Jetta Sportwagen, Golf, Audi A3 (Test Group CVWXV02.0U5N) |
| 5 | D-2 RICHARD DORENKAMP D-3 HEINZ JAKOB- NEUSSER | October 31, 2013 | COC Application to EPA for MY 2013 Passat (Test Group DVWXV02.0U4S) |
| 6 | D-2 RICHARD DORENKAMP D-3 HEINZ JAKOB- NEUSSER | October 31, 2013 | COC Application to EPA for MY 2013 VW Golf, Jetta, Jetta Sportwagen, VW Beetle, Beetle Convertible (Test Group DVWXV02.0U5N) |
| 7 | D-2 RICHARD DORENKAMP D-3 HEINZ JAKOB- NEUSSER | April 22, 2013 | COC Application to EPA for MY 2014 Jetta, Jetta Sportwagen, Golf, Beetle, Beetle Convertible, Audi A3 (Test Group EVWXV02.0U5N) |
| 8 | D-2 RICHARD DORENKAMP | March 19, 2012 | COC Application to EPA for MY 2014 Passat (Test Group EVWXV02.0U4S) |
| 9 | D-3 HEINZ JAKOB- NEUSSER D-6 OLIVER SCHMIDT | December 18, 2014 | COC Application to EPA for MY 2015 Passat, Beetle, Beetle Convertible, Jetta, Golf, Golf Sportwagen, Audi A3 (Test Group FVGAV02.0VAL) |

| | | | |
|----|---|----------------|--|
| | D-7 JÜRGEN PETER | | |
| 10 | D-3 HEINZ JAKOB- NEUSSER D-6 OLIVER SCHMIDT D-7 JÜRGEN PETER | August 4, 2015 | COC Application to EPA for MY 2016 Passat, Beetle, Beetle Convertible, Jetta, Golf, Golf Sportwagen, Audi A3 (Test Group GVGAV02.0VAL) |

All in violation of 42 U.S.C. § 7413(c)(2)(A) and 18 U.S.C. § 2.

COUNTS 11 through 18
(18 U.S.C. §§ 1343 and 2 – Wire Fraud)

D-3 HEINZ-JAKOB NEUSSER
D-5 BERND GOTTWEIS
D-6 OLIVER SCHMIDT
D-7 JÜRGEN PETER

85. Paragraphs 1 through 28 of this Second Superseding Indictment are realleged and incorporated by reference as though fully set forth herein.

86. From at least in or around May 2006 through at least in or around November 2015, in the Eastern District of Michigan, and elsewhere, defendants HEINZ-JAKOB NEUSSER, BERND GOTTWEIS, OLIVER SCHMIDT, and JÜRGEN PETER aided and abetted by each other and others, did knowingly, willfully, and with the intent to defraud, having devised and intending to devise a scheme and artifice to defraud, and to obtain money and property by means of

materially false and fraudulent pretenses, representations, and promises, knowing such pretenses, representations, and promises were false and fraudulent when made, transmit and cause to be transmitted, by means of wire, radio, and television communication, writings, signals, pictures, and sounds in interstate and foreign commerce for the purposes of executing such scheme and artifice.

Purpose of the Scheme and Artifice to Defraud

87. The purpose of the scheme was for NEUSSER, GOTTWEIS, SCHMIDT, PETER, and their co-schemers to unlawfully enrich VW and themselves by, among other things, (a) deceiving U.S. regulators in order to obtain the necessary Certificates to sell diesel vehicles in the United States; (b) selling VW diesel vehicles to U.S. customers knowing that those vehicles were intentionally designed to evade U.S. emissions standards; (c) deceiving U.S. customers by marketing VW diesel motor vehicles as “clean diesel” and otherwise environmentally-friendly; and (d) concealing VW’s intentional emissions cheating from U.S. regulators, U.S. customers, and the U.S. public.

The Scheme and Artifice to Defraud

88. The Grand Jury realleges and incorporates by reference paragraphs 32 through 57 of this Indictment as though fully set forth herein as a description of the scheme and artifice.

Use of the Wires

89. On or about the dates specified as to each count below, NEUSSER, GOTTWEIS, SCHMIDT, and PETER in Oakland County, in the Eastern District of Michigan and elsewhere, for the purpose of executing the aforesaid scheme and artifice to defraud, and attempting to do so, did knowingly transmit and cause to be transmitted, by means of wire, radio, and television communication, writings, signals, pictures, and sounds in interstate and foreign commerce for the purposes of executing such scheme and artifice, as set forth below:

| Count | Defendant(s) | Approximate Date | Description of Wire Communication |
|--------------|---|-------------------------|--|
| 11 | D-5 BERND GOTTWEIS D-6 OLIVER SCHMIDT | April 15, 2014 | Email from SCHMIDT in Michigan to GOTTWEIS in Germany concerning ICCT presentation. |
| 12 | D-6 OLIVER SCHMIDT | May 9, 2014 | Email from SCHMIDT in Michigan to a VW employee in Virginia concerning SCR dosing and high off cycle emissions. |
| 13 | D-6 OLIVER SCHMIDT D-7 JÜRGEN PETER | July 24, 2015 | Email from PETER to VW employee in Germany, copying, among others, SCHMIDT and VW employee in Michigan, concerning summary of contacts with CARB and EPA about ICCT study. |
| 14 | D-3 HEINZ- JAKOB NEUSSER D-5 BERND GOTTWEIS | August 5, 2015 | Email from SCHMIDT to NEUSSER, GOTTWEIS, and others in Germany, copying VW employee in Michigan, concerning description of meeting with CARB official. |

| | | | |
|----|--|--------------------|---|
| | D-6 OLIVER SCHMIDT | | |
| 15 | D-6 OLIVER SCHMIDT | August 7, 2015 | Email from SCHMIDT through Germany to VW employee in Michigan forwarding email discussion about diesel emissions and CARB and EPA. |
| 16 | D-3 HEINZ- JAKOB NEUSSER D-5 BERND GOTTWEIS D-6 OLIVER SCHMIDT | August 8, 2015 | Email from VW employee to SCHMIDT, copying, among others, NEUSSER and GOTTWEIS in Germany, and VW employee in Michigan, concerning description of meeting with CARB official. |
| 17 | D-5 BERND GOTTWEIS D-6 OLIVER SCHMIDT D-7 JÜRGEN PETER | August 12, 2015 | Email from SCHMIDT in Germany to VW employee in Michigan, copying, among others, GOTTWEIS and PETER, concerning discussions with CARB on the MY 2016 TDI. |
| 18 | D-6 OLIVER SCHMIDT D-7 JÜRGEN PETER | August 17, 2015 | Email from VW employee in Germany to VW employee, copying, among others, SCHMIDT, PETER, and VW employee in Michigan, concerning strategy for upcoming meeting with CARB. |

All in violation of Title 18, United States Code, Sections 1343 and 2.

THIS IS A TRUE BILL.

/s/Grand Jury Foreperson

Grand Jury Foreperson

BARBARA L. MCQUADE
United States Attorney
Eastern District of Michigan

JOHN C. CRUDEN
Assistant Attorney General
Environment & Natural Resources
Division

/s/John K. Neal

MARK CHUTKOW
Chief, Criminal Division
JOHN K. NEAL
Chief, White Collar Crimes Unit
Assistant United States Attorney
Eastern District of Michigan

/s/Jennifer Leigh Blackwell

JENNIFER LEIGH BLACKWELL
Trial Attorney

ANDREW WEISSMANN
Chief
Fraud Section, Criminal Division
United States Department of Justice

/s/ Andrew Weissmann

ANDREW WEISSMANN
Chief, Fraud Section
BENJAMIN D. SINGER
Chief, Securities & Financial Fraud Unit
DAVID FUHR
Trial Attorney

Dated: January 11, 2017

| | | |
|--|----------------------------------|------------------------------|
| United States District Court Eastern District of Michigan | Criminal Case Cover Sheet | Case Number 2:16-cr-20394 |
|--|----------------------------------|------------------------------|

NOTE: It is the responsibility of the Assistant U.S. Attorney signing this form to complete it accurately in all respects.

| | |
|--|-----------------------------|
| Companion Case Information | Companion Case Number: |
| This may be a companion case based upon LCrR 57.10 (b)(4) ¹ : | Judge Assigned: |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | AUSA's Initials: <u>JKN</u> |

Case Title: USA v. JAMES LIANG, et al

County where offense occurred : Oakland County

Check One: Felony Misdemeanor Petty

Indictment/ Information --- no prior complaint.
 Indictment/ Information --- based upon prior complaint [Case number: _____]
 Indictment/ Information --- based upon LCrR 57.10 (d) [Complete Superseding section below].

Superseding Case Information

Superseding to Case No: 16-cr-20394 Judge: Sean F. Cox

- Corrects errors; no additional charges or defendants.
- Involves, for plea purposes, different charges or adds counts.
- Embraces same subject matter but adds the additional defendants or charges below:

| Defendant name | Charges | Prior Complaint (if applicable) |
|-------------------------|--------------------------|---------------------------------|
| D-2 Richard Dorenkamp | 18 USC §§ 371, 1343, 42, | |
| D-3 Heinz-Jakob Neusser | 2; and | |
| D-4 Jens Hadler | 42 USC §7413(c)(2)(A) | |
| D-5 Bernd Gottweis | | |

Please take notice that the below listed Assistant United States Attorney is the attorney of record for the above captioned case.

January 11, 2017
Date

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¹ Companion cases are matters in which it appears that (1) substantially similar evidence will be offered at trial, or (2) the same or related parties are present, and the cases arise out of the same transaction or occurrence. Cases may be companion cases even though one of them may have already been terminated.