

COPY

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

UNITED STATES OF AMERICA

v.

D-1 JAMES ROBERT LIANG,

Defendant.

Case:2:16-cr-20394
Judge: Cox, Sean F.
MJ: Patti, Anthony P.
Filed: 06-01-2016 At 01:28 PM
SEALED MATTER (LG)

42 U.S.C. § 7413(c)(2)(A)
18 U.S.C. § 2

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”).

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 NOx.

3. The Clean Air Act prohibited manufacturers of new motor vehicles and new motor vehicle engines from selling, offering for sale, or introducing or delivering for introduction into commerce, any new motor vehicle or new motor vehicle engine 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. Volkswagen Group of America (“VW GOA”) was a wholly owned subsidiary of VW AG based in Herndon, Virginia. 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 certain documents to U.S. regulators in the Eastern District of Michigan, and elsewhere, in order to obtain authorization to sell VW AG and VW GOA (collectively “VW”) motor vehicles and motor vehicle engines in the United States. VW GOA’s Test Center California (“TCC”) performed testing related to VW diesel vehicles, and others.

12. 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

13. VW AG, through VW GOA’s office in Auburn Hills, Michigan, submitted applications to the EPA and CARB for certificates for the following 2.0 liter light-duty diesel vehicles, among others:

- 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 2010-2015 Audi A3;
- f. MY 2013-2015 VW Beetle and VW Beetle Convertible; and
- g. MY 2012-2015 VW Passat.

14. The above-referenced 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.

15. Based on the representations VW employees made in applications for the vehicles referenced above, VW received certificates from the EPA and CARB for these vehicles, allowing VW to sell these vehicles in the United States.

16. The first applications VW submitted for its newly designed diesel vehicles were for the MY 2009 Jetta/Jetta Sportwagen. The EPA approved these applications on or about April 9, 2008 and on or about June 23, 2008; and CARB approved it on or about June 6, 2008 and on or about July 2, 2008. VW continued to submit applications for each subsequent model year through model year 2016, for the diesel vehicles identified in paragraph 13 above.

17. VW represented to the public, including its U.S. customers, U.S. regulators, dealers, investors, the media, and others, that the vehicles approved by the EPA and CARB, identified in paragraph 13 above, were “clean diesel” vehicles that emitted less pollutants, including NO_x, in accordance with the new and stricter U.S. emissions standards.

18. On or about September 3, 2015, a VW senior manager admitted to the EPA and CARB, during a meeting in El Monte, California, that VW had installed a defeat device in its “clean diesel” vehicles, which caused them to emit far more NO_x than allowed under U.S. standards.

The Defendant

19. From in or about 1983 until in or about May 2008, defendant JAMES ROBERT LIANG was an employee of VW AG, working in VW AG's diesel development department in Wolfsburg, Germany. While working in diesel development, LIANG was part of a team of engineers that developed the diesel engine (the "EA 189" engine) that was designed to meet the new, tougher U.S. emissions standards for diesel vehicles. LIANG moved to the United States in or about May 2008 to assist in the launch of VW's new line of diesel vehicles that had the EA 189 engine and that VW marketed to the U.S. public and its customers as "clean diesel." From in or about May 2008 to the present, LIANG was an employee of VW GOA, working in California at VW GOA's TCC as the Leader of Diesel Competence, although he still reported to VW AG employees in Germany. In that role, LIANG assisted in certification, testing, and warranty issues for VW diesel vehicles in the United States.

The Purpose of the Conspiracy

20. The purpose of the conspiracy was for LIANG and his 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 did not meet U.S. emissions standards; (c) deceiving U.S. customers by marketing VW diesel motor vehicles as “clean diesel” knowing that those vehicles emitted NOx at levels well above U.S. standards; and (d) concealing the defeat device from U.S. regulators, VW customers, and the U.S. public.

The Conspiracy

21. For almost a decade, from at least in or about November 2006 until in or about September 2015, LIANG and his co-conspirators, including current and former VW employees, and others, agreed to defraud the United States and VW customers, and violate the Clean Air Act, by misleading the United States and VW customers about whether VW diesel motor vehicles complied with U.S. emissions standards. Almost from the beginning of VW’s process to design its new “clean diesel” vehicles, LIANG and his fellow co-conspirators designed these VW diesel vehicles not to meet U.S. emissions standards, but to cheat the testing process by making it appear as if the diesel vehicles met U.S. emissions standards when, in fact, they did not.

22. In at least in or about 2006, LIANG and his co-conspirators began to design the new EA 189 diesel engine (later known as the Generation 1 or “Gen 1”), which would be the cornerstone of a new project to sell diesel vehicles in the United States. LIANG and his co-conspirators knew the vehicles would need to

comply with stricter U.S. NOx emissions standards that became effective in 2007. Selling diesel vehicles in the U.S. market was an important strategic goal of VW's senior management. This project became known within VW as the "US'07" project.

23. LIANG and his co-conspirators, however, realized that they could not design a diesel engine that would both meet the stricter NOx emissions standards and attract sufficient customer demand in the U.S. market. Instead of designing a diesel vehicle that could legitimately meet the heightened U.S. NOx emissions standards, LIANG and his co-conspirators, including Company A employees, designed, created, and implemented a software function (the "defeat device") to cheat the standard U.S. emissions tests. LIANG and his co-conspirators referred to the defeat device software as, among other things, the "acoustic function," "switch logic," "cycle beating" software, or "emissions-tight mode."

24. While designing and implementing the defeat device software, LIANG and his co-conspirators knew that U.S. regulators would measure VW's diesel vehicles' emissions through standard tests with specific, published drive cycles. LIANG and his co-conspirators designed the defeat device to recognize whether a vehicle was undergoing standard U.S. emissions testing on a dynamometer or being driven on the road under normal driving conditions. The

defeat device accomplished this by recognizing the standard drive cycles of the EPA's and CARB's tests. 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 defeat device detected that the vehicle was not being tested, it operated in a different mode, in which the vehicle's emissions control systems were reduced substantially, causing the vehicle to emit substantially higher NOx, sometimes forty times higher than U.S. standards.

25. Starting with the first model year 2009 of VW's new "clean diesel" engine through model year 2016, LIANG and his co-conspirators, and others, then installed, and caused to be installed, the defeat device software in VW vehicles marketed and sold in the United States.

26. For each new model year of VW's diesel vehicles, VW employees met with the EPA and CARB to seek the certifications required to sell the vehicles to U.S. customers. During these meetings, some of which LIANG attended personally, LIANG and his co-conspirators misrepresented, and caused to be misrepresented, to the EPA and CARB staff that VW diesel vehicles complied with U.S. NOx emissions standards, when they knew the vehicles did not. During these meetings, LIANG and his co-conspirators described, and caused to be described,

VW's diesel technology and emissions control systems to the EPA and CARB staff in detail but omitted the existence of a defeat device.

27. Also as part of the certification process for each new model year, LIANG and his co-conspirators falsely and fraudulently certified, and caused to be certified, to the EPA and CARB that VW diesel vehicles met U.S. emissions standards and complied with the Clean Air Act. LIANG and his co-conspirators knew that if they had told the truth and disclosed the existence of the defeat device, VW could not have sold any of its diesel vehicles in the United States.

28. Having obtained the necessary EPA and CARB certificates, LIANG and his co-conspirators marketed, and caused to be marketed, VW diesel vehicles to the U.S. public as "clean diesel" and environmentally-friendly, and promoted the increased fuel economy that comes with diesel-fueled vehicles. Yet, at the same time, LIANG and his co-conspirators knew that these representations made to U.S. customers were false, that VW's diesel vehicles were not clean, and that VW's diesel vehicles were polluting the environment with NOx emissions well above U.S. emission limits.

29. As VW's "clean diesel" vehicles in the United States began to age, they experienced higher rates of warranty claims for parts and components related to emissions control systems. LIANG and his co-conspirators falsely and

fraudulently told, and caused others to tell, U.S. customers and others that a software update in or around 2014 was intended to improve the vehicles when, in fact, LIANG and his co-conspirators knew that the update used the steering wheel angle of the vehicle as a basis to more easily detect when the vehicle was undergoing emissions tests, thereby improving the defeat device's precision in order to reduce the stress on the emissions control systems.

30. After years of VW selling diesel vehicles in the United States that contained a defeat device, in or about March 2014, West Virginia University's Center for Alternative Fuels, Engines and Emissions published the results of a study commissioned by the International Council on Clean Transportation (the "ICCT study"). The ICCT study identified substantial discrepancies in the NOx emissions from certain VW vehicles when tested on the road compared to when these vehicles were undergoing EPA and CARB standard drive cycle tests on a dynamometer. Rather than admit the existence of the defeat device and tell the truth to U.S. regulators, VW customers, and the U.S. public, LIANG and his co-conspirators pursued a strategy to disclose as little as possible – to continue to hide the existence of the defeat device software.

31. 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 VW diesel 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. LIANG and his co-conspirators knew that if CARB learned of the defeat device software, CARB would share that information with the EPA, and vice versa.

32. In implementing their strategy of disclosing as little as possible, LIANG and his co-conspirators intentionally made, and caused to be made, false and fraudulent statements to the EPA and CARB when providing testing results, data, presentations, and statements to the EPA and CARB. Through these false and fraudulent statements, LIANG and his co-conspirators attempted to make it appear that there were innocent mechanical and technological problems to blame, while secretly knowing that the primary reason for the discrepancy was the defeat device installed in every VW diesel vehicle sold in the United States.

33. LIANG and his co-conspirators also falsely and fraudulently told, and caused others to tell, U.S. customers and U.S. regulators that a voluntary recall in or around early 2015 was intended to “fix” the issues that were causing the discrepancy, when, in fact, LIANG and his co-conspirators knew that the update

did not remove the defeat device software that was the true reason for the discrepancy.

34. LIANG and his co-conspirators caused the defeat device software to be installed on all of the approximately 500,000 VW diesel 2.0 liter light-duty passenger vehicles sold in the United States from 2009 through 2015.

COUNT 1

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

35. Paragraphs 1 through 19 of this Indictment are realleged and incorporated by reference as though fully set forth herein.

36. From at least in or about November 2006 and continuing through in or about September 2015, in Oakland County, within the Eastern District of Michigan, and elsewhere, defendant JAMES ROBERT LIANG along with others, known and unknown to the Grand Jury, did willfully, knowingly, and deliberately 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, 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, to wit, falsely representing to U.S. purchasers of VW diesel vehicles that those vehicles were “clean diesel” and met U.S. NOx emissions standards, 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).

Purpose of the Conspiracy

37. Paragraph 20 of this Indictment is realleged and incorporated by reference herein as the purpose of the conspiracy.

Manner and Means of the Conspiracy

38. In furtherance of this conspiracy, and to accomplish its object, the methods, manner, and means that were used are described in paragraphs 21 through 34 of this Indictment and are realleged and incorporated by reference as though fully set forth herein.

Overt Acts

39. As part of the certification process for the new EA 189 diesel engine, LIANG attended a meeting with CARB in El Monte, California, on or about October 3, 2006, and with the EPA in Ann Arbor, Michigan, on or about October 5, 2006. During the meetings with the EPA and CARB, LIANG and other VW employees presented on the EA 189 diesel engine, showing how VW had designed an engine that would meet the stricter U.S. emissions standards. LIANG and the other VW employees made no mention that the EA 189 diesel engine could not meet U.S. NOx emission standards nor disclosed the existence of the defeat device software in their presentations.

40. On or about November 10, 2006, a Company A employee 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.

41. On or about March 19, 2007, LIANG, and other VW employees, met with representatives of the EPA in Ann Arbor, Michigan. During the meeting, LIANG and other VW employees described, among other things, the AECs associated with VW's EA 189 diesel engine. VW, through LIANG and others, presented an overview of the engine design and proposed operation of the emission control systems. Throughout the meeting, LIANG 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.

42. On or about March 21, 2007, LIANG and other VW employees met with CARB officials in El Monte, California. CARB had requested that VW specifically discuss the AECs associated with the emissions control systems in the EA 189 diesel engine design. Throughout the meeting, LIANG 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.

43. On or about October 12, 2007, a VW employee emailed a project update to LIANG and others that was an update on the progress of the defeat device software, stating (in German) that even with recognition of driving cycles, the VW diesel engine continued to fail U.S. emissions standards. The project listed "[s]oftware function adaptations" that included "detection of other driving

cycles” as part of a plan for the “[r]eduction of the engine-out emission in the ‘emission tight operation.’”

44. In or about May 2008, LIANG moved from Germany to the United States to work for VW GOA in California to support the launch of VW’s “clean diesel” vehicles that included the defeat device software.

45. On or about July 1, 2008, a VW employee sent an email to LIANG and other VW employees indicating that the new “clean diesel” had arrived in the United States, including pictures of a VW vehicle painted with green vines and the words “Jetta TDI Clean Diesel.”

46. On or about July 29, 2008, LIANG emailed another VW engineer with ideas on how to effectively calibrate the defeat device to recognize U.S. test cycles.

47. On or about September 5, 2013, LIANG exchanged emails with another VW employee discussing preconditioning for testing sequences with the email subject (in German) “Test sequence GEN1 angle issues.” In response to LIANG’s email indicating how the vehicle should be prepared for a test, the VW employee indicated (in German) that the “test sequence sound[ed] exciting,” and that “If this goes through without problems, the function is probably truly watertight! ;)”.

48. On or about April 9, 2014, LIANG received an emailed invitation to attend a meeting with other VW employees to discuss the results of the ICCT study released in March 2014. A topic noted for discussion was the difference in NOx emissions between when VW diesel vehicles were tested on the dynamometer versus on-road by the study, as well as the potential reasons for the difference while omitting the true reason for the difference, i.e., the defeat device.

49. On or about December 4, 2014, a VW employee sent an email to LIANG and other VW employees attaching a presentation dated December 2, 2014, showing the results of VW's tests in which VW employees, including LIANG, attempted to simulate the ICCT study's testing. The presentation showed that VW's testing confirmed the results of the ICCT study and offered explanations for the increased NOx emissions from on-road tests and the standard EPA emissions' tests performed on the dynamometer. The listed potential reasons for the discrepancy did not include VW's utilization of the defeat device software. The presentation then explained how "optimized" new software would address the purported reasons for the NOx emissions discrepancy.

50. On or about March 3, 2015, an email chain that included LIANG and other VW employees, with the subject "VW TDI test at [C]ARB," discussed providing a vehicle to CARB for testing, because CARB was testing the

effectiveness of VW's software fix. A VW employee concluded "check the [s]oftware with James [LIANG]."

51. On or about April 28, 2015, a VW employee sent an email and copied LIANG and other VW employees. The VW employee wrote (in German) "we 'only just need a plausible explanation' as to why the emissions are still high!!!"

52. On or about May 12, 2015, a VW employee sent an email, copying LIANG and other VW employees, in response to testing by CARB and exclaimed (in German), "We need a story for the situation!"

53. On or about June 29, 2015 a VW employee sent an email, with the subject "[C]ARB Status," and stated (in German): "We must be sure to prevent the authority from testing the Gen 1! If the Gen 1 goes onto the roller at the CARB, then we'll have nothing more to laugh about!!!!!"

54. On or about July 2, 2015, a VW employee sent an email to LIANG and other VW employees, with the subject "RE: Status Update USA," seeking input on how to respond to U.S. regulators, and noting (in German), "the key word 'creativity' would be helpful here."

55. On or about July 23, 2015, a VW employee sent a calendar invite to LIANG and other VW employees, with the subject "Status Update" and with an

agenda that stated, “[C]ARB is still waiting for Answers We still have no good explanations!!!!”

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

COUNT 2

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

56. Paragraphs 1 through 34 of this Indictment are realleged and incorporated by reference as though fully set forth herein.

57. On multiple dates during the period from on or about July 2011 until on or about September 3, 2015, within the Eastern District of Michigan, and elsewhere, defendant JAMES ROBERT LIANG 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 of conformity for certain diesel vehicles, LIANG 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,

LIANG 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.

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

THIS IS A TRUE BILL.

s/Grand Jury Foreperson

Grand Jury Foreperson

BARBARA L. MCQUADE
United States Attorney
Eastern District of Michigan

s/Mark Chutkow

MARK CHUTKOW
Chief, Criminal Division
JOHN K. NEAL
Chief, Economic Crimes Unit
Assistant United States Attorney
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JENNIFER L. BLACKWELL
Trial Attorney
Environment & Natural Resources Division, Environmental Crimes Section
United States Department of Justice

ORIGINAL

United States District Court
Eastern District of Michigan

Criminal Case Co

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Judge: Cox, Sean F.
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Filed: 06-01-2016 At 01:28 PM
SEALED MATTER (LG)

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: <i>MC</i>

Case Title: USA v. JAMES ROBERT LIANG

County where offense occurred: Oakland

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: _____ Judge: _____

- 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:

<u>Defendant name</u>	<u>Charges</u>	<u>Prior Complaint (if applicable)</u>
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Please take notice that the below listed Assistant United States Attorney is the attorney of record for the above captioned case.

June 1, 2016
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.

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

No. 16-cr-20394

Plaintiff,

HON. SEAN F. COX

v.

D-1 JAMES ROBERT LIANG,

Offense:

18: U.S.C. § 371

Defendant.

Conspiracy to Defraud the United
States, to Commit Wire Fraud, and to
Violate to Clean Air Act

Maximum Penalty:

5 years

Maximum Fine:

Not more than \$250,000 or Twice the
Gross Gain/Loss

Mandatory Supervised Release:

3 years

Rule 11 Plea Agreement

Pursuant to Rule 11 of the Federal Rules of Criminal Procedure, defendant JAMES ROBERT LIANG and the United States Attorney's Office for the Eastern District of Michigan, the United States Department of Justice, Criminal Division, Fraud Section, and the United States Department of Justice, Environment and Natural Resources Division, Environmental Crimes Section (collectively hereafter, "the government") agree as follows:



1. Guilty Plea

A. Count of Conviction

Defendant will enter a plea of guilty to Count One of the Indictment, which charges him with conspiracy to defraud the United States, to commit wire fraud, in violation of Title 18, United States Code, Section 1343, and to violate the Clean Air Act, in violation of Title 42, United States Code, Section 7413(c)(2)(A), all in violation of Title 18, United States Code, Section 371, and for which the penalty is a maximum term of imprisonment of five years and a fine of up to \$250,000 or twice the amount of the gross gain or loss, whichever is greater. The defendant is also subject to a special assessment of \$100 and up to three years of supervised release.

B. Elements of Offense

The indictment charges defendant LIANG with a conspiracy to: (1) defraud the United States by obstructing the lawful function of the federal government, in violation of 18 U.S.C. § 371; (2) commit wire fraud, in violation of 18 U.S.C. § 1343; and (3) violate the Clean Air Act, in violation of 42 U.S.C. § 7413(c)(2)(A).

(A) The elements for conspiracy to obstruct the lawful function of the federal government are as follows:

(1) That two or more persons conspired, or agreed, to defraud the United States, or one of its agencies or departments, in this case, the Environmental Protection Agency (EPA), by dishonest means;

(2) That the defendant knowingly and voluntarily joined the conspiracy;
and

(3) That a member of the conspiracy did one of the overt acts described in the indictment for the purpose of advancing or helping the conspiracy.

(B) The elements for conspiracy to violate the wire fraud statute and Clean Air Act are as follows:

(1) That two or more persons conspired, or agreed, to commit a crime, in this case, a violation of the wire fraud statute (18 U.S.C. § 1343) and the Clean Air Act (42 U.S.C. § 7413(c)(2)(A)) as described in paragraphs (4) and (5) respectively, below;

(2) That the defendant knowingly and voluntarily joined the conspiracy;

(3) That a member of the conspiracy did one of the overt acts described in the indictment for the purpose of advancing or helping the conspiracy.

(4) Object of Conspiracy – Wire Fraud - 18 U.S.C. § 1343:

(a) The defendant knowingly participated in, devised, or intended to devise a scheme to defraud in order to obtain money or property;

- (b) The scheme included a material misrepresentation or concealment of a material fact;
 - (c) The defendant had the intent to defraud; and
 - (d) The defendant used (or caused another to use) wire, radio or television communications in interstate or foreign commerce in furtherance of the scheme.
- (5) Object of Conspiracy - Clean Air Act - 42 U.S.C. § 7413(c)(2)(A):
- (a) The defendant knowingly made (or caused to be made) a false material statement, representation, or certification, or omission of material information;
 - (b) The statement, representation, or certification that was made (or omitted), or caused to be made or omitted, was in a notice, application, record, report, plan or other document required to be filed or maintained under the Clean Air Act; and
 - (c) The statement, representation, or certification, or omission of information, was material.

C. Factual Basis for Guilty Plea

The following facts are a sufficient and accurate basis for defendant's guilty plea:

From 1983 to May 2008, defendant JAMES ROBERT LIANG was an employee of Volkswagen AG ("VW AG"), working in VW AG's diesel development department in Wolfsburg, Germany.

In about 2006, LIANG and his co-conspirators began to design a new "EA 189" diesel engine. They soon realized, however, that the engine could not meet both customer expectations as well as new, stricter U.S. emissions standards. As a result, LIANG and his co-conspirators pursued and planned the use of a software function to cheat standard U.S. emissions tests (the "defeat device"). LIANG used the defeat device software while working on the EA 189 and assisted in making the defeat device software work. The co-conspirators needed to do so to obtain a certificate of conformity from the United States Environmental Protection Agency ("EPA") in order to sell vehicles in the United States. LIANG understood that EPA would not certify vehicles for sale in the United States if EPA knew that the vehicles contained a defeat device.

In or around 2008, LIANG worked with his co-conspirators to calibrate and refine the defeat device. This defeat device recognized whether the affected VW diesel vehicles were undergoing standard U.S. emissions testing on a dynamometer or being driven on the road under normal driving conditions. The defeat device accomplished this by recognizing the standard drive cycles used in EPA's emissions tests. If the vehicle's software detected that it was being tested, the vehicle performed in one mode, which satisfied U.S. emissions standards for nitrogen oxide ("NOx"). If the defeat device detected that the vehicle was not being tested, it operated in a different mode, in which the vehicle's emissions control systems were reduced substantially, causing the vehicle to emit substantially higher amounts of NOx, sometimes forty times higher than U.S. standards.

LIANG moved to the United States in May 2008 to assist in the launch of VW's diesel vehicles with EA 189 engines. From about May 2008 to the present, LIANG was the Leader of Diesel Competence for VW Group of America ("VW GOA"), a VW subsidiary. In that role, LIANG assisted in certification, testing, and warranty issues for VW diesel vehicles in the United States.

For each new model year of VW's diesel vehicles, VW employees met with EPA to seek the certifications required to sell the vehicles to U.S. customers. During one of these meetings, which LIANG attended personally in Ann Arbor, Michigan with EPA on March 19, 2007 and on March 21, 2007 with the California Air Resources Board ("CARB"), LIANG participated as his co-conspirators misrepresented that VW diesel vehicles complied with U.S. NOx emissions standards. During this meeting, LIANG's co-conspirators described VW's diesel technology and emissions control systems in detail to the staffs of the EPA and CARB but intentionally omitted LIANG and his co-conspirators' plan to include a defeat device in VW diesel vehicles. LIANG knew that VW was cheating by implementing the defeat device and that he and his co-conspirators were deceiving EPA in this meeting.

As part of the certification process for each new model year, including model years 2009 through 2016, LIANG knew his co-conspirators continued to falsely and fraudulently certify to EPA and CARB that VW diesel vehicles met U.S. emissions standards and complied with the Clean Air Act. During this time, LIANG and his co-conspirators knew that VW marketed VW diesel vehicles to the U.S. public as "clean diesel" and environmentally-friendly, and promoted the increased fuel economy. LIANG and his co-conspirators knew that these representations made to U.S. customers were false, and that VW's diesel vehicles were not clean.

As VW's "clean diesel" vehicles in the United States began to age, they experienced higher rates of warranty claims for parts and components related to emissions control systems. Some of LIANG's coconspirators believed that the increased claims were a result of the vehicle operating in testing mode too long, rather than switching to "road mode." Because of these increased claims, LIANG worked with his co-conspirators to enhance the defeat device to allow the vehicle to more easily recognize when the vehicle was no longer in testing mode. LIANG knew that his co-conspirators falsely and fraudulently told U.S. customers and others that a software update in about 2014 was intended to improve the vehicles when, in fact, LIANG and his co-conspirators knew that part of the update was intended to improve the defeat device's precision in order to reduce the stress on the emissions control systems.

In the spring of 2014, a non-government organization published the results of a study which identified substantial discrepancies in the NOx emissions from certain VW vehicles when tested on the road compared to when these vehicles were undergoing EPA standard drive cycle tests on a dynamometer. Following the study, CARB, in coordination with the EPA, attempted to work with VW to determine the

cause for the higher NOx emissions in VW diesel vehicles on the road as opposed to the dynamometer. LIANG and his co-conspirators discussed how they could answer the regulatory agencies' questions without revealing the defeat device. LIANG knew that, after these discussions, his co-conspirators intentionally made fraudulent explanations to the EPA and CARB when providing testing results, data, presentations, and statements to the EPA and CARB by failing to disclose the fact that the primary reason for the discrepancy was the defeat device.

LIANG knew that his co-conspirators also falsely and fraudulently told U.S. customers, EPA, and CARB that a voluntary recall in or around early 2015 was intended to "fix" the issues that were causing the discrepancy, when, in fact, LIANG and his co-conspirators knew that although the update lowered the NOx emissions in certain VW diesel vehicles on the road, the update did not remove the defeat device software that was the true reason for the discrepancy.

LIANG and his co-conspirators caused defeat device software to be installed in all of the approximately 500,000 VW diesel 2.0 liter light-duty passenger vehicles sold in the United States from 2009 through 2015.

2. Sentencing Guidelines

A. Standard of Proof

The Court will find sentencing factors by a preponderance of the evidence.

B. Guideline Range

The parties agree that the defendant's entire guideline range would be higher than sixty (60) months, which represents the statutory maximum term of imprisonment for a violation of Title 18, United States Code, Section 371. Accordingly, the 60-month statutory maximum becomes the relevant guidelines range.

3. SENTENCE

The Court will impose a sentence pursuant to 18 U.S.C. § 3553 and in doing so must consider the sentencing guideline range.

A. Imprisonment

Pursuant to Federal Rule of Criminal Procedure (11)(C)(1)(C) the sentence of imprisonment in this case may not exceed the top of the sentencing guideline range of sixty months, as determined by Paragraph 2.

B. Supervised Release

A term of supervised release, if imposed, follows the term of imprisonment. There is no agreement on supervised release. In other words, the Court may impose any term of supervised release up to the statutory maximum term, which in this case is three (3) years. The agreement concerning imprisonment described above in Paragraph 3A does not apply to any term of imprisonment that results from any later revocation of supervised release.

C. Special Assessment

Defendant will pay a special assessment of \$100.00 at the time of sentencing.

D. Fine

The parties agree that the fine will be no more than \$250,000 or twice the gross gain or loss, whichever is greater.

E. Restitution

The Court shall order restitution to any identifiable victim of defendant's offense.

4. Cooperation

Defendant agrees to assist the government in the investigation and prosecution of others involved in criminal activities, as specified below.

A. Truthful Information and Testimony. Defendant will provide truthful and complete information concerning all facts of this case known to him. Defendant will provide full debriefings, as requested by the government, to federal, state, and local law enforcement agencies. Defendant will provide truthful testimony at all proceedings, criminal, civil, or administrative, as requested by the government. Such testimony may include, but is not limited to, grand jury proceedings, trials, and pretrial and post-trial proceedings. Defendant agrees to be available for interviews in preparation of all testimony. Defendant understands that this obligation to provide cooperation continues after sentencing and that failure to follow through constitutes a breach of this agreement. Defendant shall cooperate fully with the government, and any other law enforcement agency designated by the government, including but not limited to the Staatsanwaltschaft Braunschweig in Germany.

B. Nature of Cooperation. The defendant agrees to cooperate in good

faith, meaning that the defendant will not only respond truthfully and completely to all questions asked, but will also volunteer all information that is reasonably related to the subjects discussed in the debriefing. In other words, the defendant may not omit facts about crimes, participants, or defendant's involvement, and then claim not to have breached this agreement because defendant was not specifically asked questions about those crimes, participants, or involvement. Defendant will notify the government in advance if defendant intends to offer a statement or debriefing to other persons other than defendant's attorney. Defendant is not prevented in any way from providing truthful information helpful to the defense of any person. Any actions or statements inconsistent with continued cooperation under this agreement, including but not limited to criminal activity, or a statement indicating a refusal to testify, or any other conduct which in any way undermines the effectiveness of defendant's cooperation, constitutes a breach of this agreement.

C. Government's Authority Regarding Substantial Assistance

(1) Substantial Assistance Determination. It is exclusively within the government's discretion to determine whether defendant has provided substantial assistance. Upon the government's determination that defendant's cooperation amounts to substantial assistance in the investigation or prosecution of others, the

government will either seek a downward departure at sentencing under U.S.S.G. § 5K1.1, or a reduction of sentence pursuant to Fed. R. Crim. P. 35, as appropriate. If the government makes such a motion, the amount of the reduction, if any, will be determined by the Court.

- (2) Use of Information against Defendant. In exchange for defendant's agreement to cooperate with the government, as outlined above, the government agrees not to use new information that defendant provides (pursuant to this agreement) about defendant's own criminal conduct against defendant at sentencing in this case. Such information may be revealed to the Court but may not be used by the government against the defendant in determining defendant's sentence range, choosing a sentence recommendation within the range, or departing from the range. There shall be no such restrictions on the use of information: (a) previously known to law enforcement agencies; (b) revealed to law enforcement agencies by, or discoverable through, an independent source; (c) in a prosecution for perjury or giving a false statement; or (d) in the event there is a breach of this agreement.

5. Use of Withdrawn Plea Agreement

If the Court allows Defendant to withdraw his guilty plea for a “fair and just reason,” pursuant to Fed. R. Crim. P. 11(d)(2)(B), Defendant waives his rights under Fed. R. Evid. 410, and the government may use his guilty plea, any statement made under oath at the change-of-plea hearing, and the factual basis statement in this Plea Agreement, against him in any proceeding.

6. Other Charges

If the Court accepts this agreement, the government will dismiss all remaining charges in this case against the defendant.

7. Each Party’s Right to Withdraw from This Agreement

The government may withdraw from this agreement if the Court finds the correct guideline range to be different than is determined by Paragraph 2B.

Defendant may withdraw from this agreement, and may withdraw his guilty plea, if the Court decides to impose a sentence higher than the maximum allowed by Paragraph 3. This is the only reason for which defendant may withdraw from this agreement.

8. Consequences of Withdrawal of Guilty Plea or Vacation of Conviction

If defendant is allowed to withdraw his guilty plea or if any conviction entered pursuant to this agreement is vacated, the Court shall, on the government's request, reinstate any charges that were dismissed as part of this agreement. If additional charges are filed against defendant within six months after the date the order vacating defendant's conviction or allowing him to withdraw his guilty plea becomes final, which charges relate directly or indirectly to the conduct underlying the guilty plea or to any conduct reflected in the attached worksheets, defendant waives his right to challenge the additional charges on the ground that they were not filed in a timely manner, including any claim that they were filed after the limitations period expired.

9. Appellate Waiver

Defendant waives any right he may have to appeal his conviction on any grounds. This waiver does not bar a claim of ineffective assistance of counsel in court.

10. Padilla Waiver

Defendant acknowledges that he is not a citizen of the United States, and that his guilty plea in this case may affect or even foreclose his eligibility to remain in this country following the imposition of sentence herein. Defendant has discussed these matters with his attorney in this case, but he expressly agrees that his decision

to plead guilty is in no way conditioned upon or affected by the advice he has been given regarding any potential immigration consequences of his conviction.

Defendant further agrees that because his decision to plead guilty in this case is wholly independent of the immigration consequences of a conviction, defendant agrees that he will not seek to challenge his guilty plea in any later proceeding via collateral attack on any basis relating to the immigration consequences of his plea.

11. Parties to Plea Agreement

Unless otherwise indicated, this agreement does not bind any government agency except the United States Attorney's Office for the Eastern District of Michigan, the United States Department of Justice, Criminal Division, Fraud Section, and the United States Department of Justice, Environment and Natural Resources Division, Environmental Crimes Section.

12. Scope of Plea Agreement

This agreement, which includes all documents that it explicitly incorporates, is the complete agreement between the parties. This agreement supersedes all other promises, representations, understandings and agreements between the parties concerning the subject matter of this plea agreement that were made at any time before the guilty plea is entered in court. Thus, no oral or written promises made by the government to defendant or to the attorney for the defendant at any time before

defendant pleads guilty are binding except to the extent they have been explicitly incorporated into this agreement.

Notwithstanding the previous paragraph, if defendant has entered into a proffer agreement in writing or a cooperation agreement in writing with the government, this plea agreement does not supersede or abrogate the terms of any such prior written agreement.

This agreement also does not prevent any civil or administrative actions against defendant, or any forfeiture claim against any property, by the United States or any other party.

13. Acceptance of Agreement by Defendant

This plea offer expires unless it has been received, fully signed, in the Office of the United States Attorney by 5:00 P.M. on August 31, 2016. The government reserves the right to modify or revoke this offer at any time before defendant pleads guilty.

BARBARA L. MCQUADE
United States Attorney
Eastern District of Michigan

JOHN C. CRUDEN
Assistant Attorney General
Environment and Natural Resources
Division
Department of Justice



Mark Chutkow
Chief, Criminal Division
John Neal
Chief, White Collar Crimes Unit



Jennifer Leigh Blackwell
Trial Attorney
Environmental Crimes Section

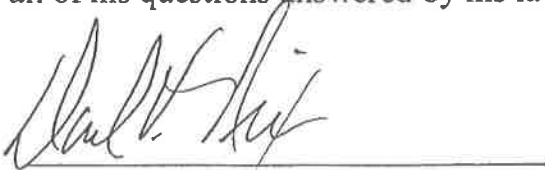
ANDREW WEISSMANN
Chief, Fraud Section
Criminal Division
Department of Justice



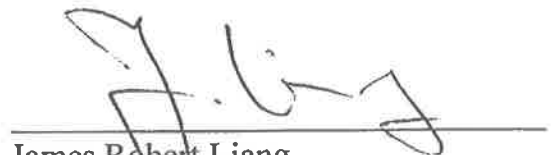
Benjamin D. Singer
Chief
Securities & Financial Fraud Unit
Alison Anderson
Trial Attorney

Date: 9/9/2016

By signing below, defendant acknowledges that he has read (or been read) this entire document, understands it, and agrees to its terms. He also acknowledges that he is satisfied with his attorney's advice and representation. Defendant agrees that he has had a full and complete opportunity to confer with his lawyer, and has had all of his questions answered by his lawyer.



Daniel V. Nixon
Attorney for Defendant



James Robert Liang
Defendant

Date: 8/31/16

Date: 08.31.2016