ENFORCEMENT DIVISION

NOTICE OF VIOLATION FOR FIAT CHRYSLER AUTOMOBILES N.V., FCA US LLC, AND CHRYSLER GROUP LLC

DIESEL 3.0L ENGINE VEHICLES

To

FCA US LLC
1000 Chrysler Drive
Auburn Hills, MI 48326

As Responsible Certification Filing Agent for
Fiat Chrysler Automobiles N.V., FCA US LLC and Chrysler Group LLC

Date of Issue
January 12, 2017

Issued By
Dr. Todd P. Sax, Chief
Enforcement Division
California Air Resources Board
Summary

The California Air Resources Board (CARB) is issuing this Notice of Violation (NOV) to FCA US LLC, Fiat Chrysler Automobiles N.V., and Chrysler Group LLC (collectively FCA) as the agents responsible for all certification applications to CARB for violations associated with approximately 14,000 model year (MY) 2014 through 2016, 3.0 liter diesel powered vehicles. FCA violated California law by failing to disclose Auxiliary Emission Control Devices (AECDs) for each model year in vehicle certification applications. Some of the undisclosed AECDs shut off portions of the emissions control system under select conditions, lead to substantial excess nitrogen oxide (NOx) emissions, and are not triggered during certification cycles. CARB is continuing to investigate whether some of these undisclosed AECDs are in fact defeat devices.

Nitrogen oxide (NOx) emissions in California are a key contributor to ambient ozone and fine particulate matter pollution which is associated with premature death, increased hospitalizations, emergency room visits due to exacerbation of chronic heart and lung diseases, and other serious health impacts. A major contributor to NOx emissions is combustion from diesel engines and vehicles. California law requires every vehicle imported, offered for sale, or sold in California to be certified pursuant to California law to ensure each vehicle meets California’s strict emissions standards. These standards were adopted to help meet federal ambient air quality standards and to protect public health.

The violations detailed in this NOV are a serious matter. This NOV outlines FCA’s violations of State law, causing substantial excess, illegal, and on-going emissions and harm that have impacted, and continue to impact, public health and the environment in California. Through the enforcement process, CARB will seek to ensure that FCA brings the vehicles into full compliance with State emissions standards and mitigates past, current, and future harm to the environment. CARB will assess penalties and achieve other remedies as allowed by law. Any modifications necessary to bring the vehicles into compliance will be handled through this enforcement action.

Alleged Violations

FCA submitted MY 2014 applications for certification to CARB and manufactured vehicles, classified as light duty trucks (LDT), under test group ECRXT03.05PV. This test group includes the Jeep Grand Cherokee and Ram 1500 series of vehicles which have been certified through MY 2016 and contain numerous undisclosed AECDs for each model year.

On September 25, 2015¹, CARB sent a letter to several vehicle manufacturers notifying them of CARB’s intent to utilize recently developed screening tests to assess the performance of diesel vehicles in-use. These screening tests were developed to detect

non-approved AECDs and defeat devices. CARB’s test results show higher emissions during screening tests than are seen during certification test cycles. Follow up investigation by CARB revealed that AECDs utilized in these FCA test groups were not disclosed to CARB during certification.

The AECDs that were not disclosed for the Jeep Grand Cherokee and Ram 1500 test groups during certification for MY 2014-2016 are listed in Table 2, which is marked as Confidential Business Information (CBI) as FCA may assert a CBI claim for some or all of these AECDs. CARB is continuing its investigation to identify any additional undisclosed AECDs in these test groups and other FCA test groups.

Failure to disclose AECDs is a violation of State law. CARB’s analysis reveals that several of the undisclosed AECDs increase NOx emissions, are not present during certification test cycles, and therefore might be considered a defeat device. The definition of a defeat device is any AECD that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use (40 C.F.R. § 86.1803-01). If disclosed during certification, an AECD could be approved for the following reasons: the AECD conditions are substantially included in the Federal emission test procedures; the need for the AECD is justified in terms of protecting the vehicle against damage or accident; the AECD does not go beyond the requirements of engine starting; or the AECD is present only for emergency vehicles and the need is justified. Unless FCA can justify why each undisclosed and therefore illegal AECD is necessary, each could constitute a defeat device and additional violation of State law.

Table 1 lists the FCA 3.0L diesel-powered test groups that contain undisclosed AECDs.

<table>
<thead>
<tr>
<th>Model Year</th>
<th>Company</th>
<th>CARB Executive Order</th>
<th>Test Group</th>
<th>Models</th>
<th>Sales in CA</th>
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<tr>
<td>2014</td>
<td>Chrysler Group LLC</td>
<td>A-009-1207-1</td>
<td>ECRXT03.05PV</td>
<td>Jeep Grand Cherokee &amp; Ram 1500</td>
<td>3165</td>
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<td>2015</td>
<td>Chrysler Group LLC</td>
<td>A-009-1257-1</td>
<td>FCRXT03.05PV</td>
<td>Jeep Grand Cherokee &amp; Ram 1500</td>
<td>5186</td>
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<td>2016</td>
<td>FCA US LLC</td>
<td>A-009-1297</td>
<td>GCRXT03.05PV</td>
<td>Jeep Grand Cherokee &amp; Ram 1500</td>
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<td></td>
<td></td>
<td></td>
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<td>TOTAL SOLD</td>
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</table>

*Projected sales

Alleged violations of State law are described below. Definitions of some terms used appear in Section B. Some of the pertinent California laws and California and federal regulations applicable to these violations are provided in Section C. As the investigation is continuing and additional facts are being discovered, CARB reserves the right to amend or supplement this NOV.
1. **Invalid certification applications (e.g., undisclosed AECDs)**

For MY 2014 vehicles, California Code of Regulations, title 13, section 1961(d) incorporates by reference the certification requirements and test procedures in the “California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles” (2001-2014 Test Procedures). The 2001-2014 Test Procedures require manufacturers to, among other things, list all AECDs installed on their vehicles, including a justification for each AECD, the parameters they sense and control, a detailed justification of each AECD which results in a reduction in effectiveness of the emission control system, and rationale for why the AECD is not a defeat device. In its applications for certification for those vehicles, FCA failed to disclose all AECDs used in these vehicles, and failed to provide the required information for those previously undisclosed AECDs. In addition, FCA failed to completely describe the emission control system and how it functions, including basic calibration information (40 C.F.R. § 86.1844-01).

For MY 2015 and subsequent model year vehicles, California Code of Regulations, title 13, section 1961.2(d) incorporates by reference the certification requirements and test procedures in the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles” (2015 Test Procedures). The 2015 Test Procedures require manufacturers to, among other things, list all AECDs installed on their vehicles, including a justification for each AECD, and rationale for why the AECD is not a defeat device. In its applications for certification for those vehicles, FCA failed to disclose all AECDs used in these vehicles, and failed to provide the required information for those previously undisclosed AECDs. In addition, FCA failed to completely describe the emission control system and how it functions, including basic calibration information (40 C.F.R. § 86.1844-01).

2. **Importation, delivery, purchase, acquisition, or receipt of uncertified vehicles**

Health and Safety Code section 43151 prohibits any person who operates a place of business in California from, among other things, importing, delivering, purchasing, acquiring, or receiving a new motor vehicle for use, registration, or resale in this State unless such vehicle has been certified pursuant to Chapter 2, Part 5, Division 26 of the Health and Safety Code. In addition, no person may assist in such action. In its MY 2014-2016 applications for certification to CARB, FCA failed to disclose certain AECDs. Nevertheless, FCA imported, delivered, purchased, acquired, and/or received approximately 14,000 new vehicles listed in Table 1 that contained previously undisclosed AECDs and those vehicles did not match the vehicles that were certified by CARB. Therefore, FCA imported, delivered, purchased, acquired, and/or received
approximately 14,000 new vehicles listed in Table 1 above that were not certified in accordance with California requirements and/or assisted in such acts.

3. **Intentional or negligent importation, delivery, purchase, receipt or acquisition of uncertified vehicles**

Health and Safety Code section 43152 prohibits any person who is engaged in California in the business of selling new vehicles from intentionally or negligently importing, delivering, purchasing, receiving or otherwise acquiring a new vehicle that has not been certified pursuant to Chapter 2, Part 5, Division 26 of the Health and Safety Code, or assisting in such acts. FCA intentionally or negligently imported, delivered, purchased, received, or acquired approximately 14,000 new vehicles that are listed in Table 1 that contained previously undisclosed AECDs and/or defeat devices and those vehicles did not match the vehicles that were certified by CARB. Therefore, FCA intentionally or negligently imported, delivered, purchased, received, or acquired approximately 14,000 new vehicles listed in Table 1 that were not certified in accordance with California requirements, and/or assisted in such acts.

4. **Intentional or negligent sales or offers to sell uncertified vehicles**

Health and Safety Code section 43153 prohibits any person who is engaged in California in the business of selling vehicles from intentionally or negligently selling or offering to sell a new vehicle that has not been certified pursuant to Chapter 2, Part 5, Division 26 of the Health and Safety Code. FCA intentionally or negligently sold or offered to sell approximately 14,000 new vehicles that are listed in Table 1 that contained previously undisclosed AECDs and/or defeat devices and those vehicles did not match the vehicles that were certified by CARB. Therefore, FCA intentionally or negligently sold or offered to sell approximately 14,000 new vehicles that are listed in Table 1 that were not certified in accordance with California requirements, and/or assisted in such acts.

5. **Sale of vehicles that do not meet emission standards**

Health and Safety Code section 43211 prohibits any manufacturer from selling, attempting to sell, or causing to be offered for sale a new vehicle that fails to meet emission standards. FCA sold, attempted to sell, or caused to be offered for sale approximately 14,000 new vehicles that are listed in Table 1 that did not meet emission standards.

While each undisclosed AECD on each vehicle is a separate violation, CARB is particularly concerned with AECDs listed in Table 2 that increase emissions.
6. **Failure to comply with the emission standards or test procedures – Durability Data Vehicle**

Health and Safety Code section 43212 requires manufacturers and distributors to comply with the emission standards and test procedures adopted by CARB. FCA violated the test procedures, as described below.

For MY 2014 vehicles, California Code of Regulations, title 13, section 1961(d), which incorporates by reference the 2001-2014 Test Procedures, requires manufacturers to conduct a durability demonstration for each durability group (40 C.F.R. § 86.1823-08). One durability demonstration is required for each durability group, and the configuration of the durability data vehicle (DDV) is determined according to the provisions of § 86.1822–01 (40 C.F.R. § 86.1829-01(a)). Section 86.1822-01 requires the manufacturer to select the DDV configuration which is expected to generate the highest level of exhaust emission deterioration as the DDV for each durability group (40 C.F.R. § 86.1822-01). The undisclosed AECDs changed the vehicle configuration such that the DDVs were not of a “configuration which is expected to generate the highest level of exhaust emission deterioration.”

For MY 2015 and subsequent model year vehicles, California Code of Regulations, title 13, section 1961.2(d) incorporates by reference the 2015 Test Procedures, which incorporate the same regulatory requirements that apply to the MY 2014 vehicles, described above. The undisclosed AECDs changed the vehicle configuration such that the DDVs were not of a “configuration which is expected to generate the highest level of exhaust emission deterioration.”

7. **Failure to comply with the emission standards or test procedures – Emissions Data Vehicle (EDV)**

Health and Safety Code section 43212 requires manufacturers and distributors to comply with the emission standards and test procedures adopted by CARB. FCA violated the test procedures, as described below.

For MY 2014 vehicles, California Code of Regulations, title 13, section 1961(d), which incorporates by reference the 2001-2014 Test Procedures, requires manufacturers to conduct exhaust emissions testing for each test group (40 C.F.R. § 86.1829-15(b)). Within each test group, the manufacturer must select the emissions data vehicle (EDV) configuration which is expected to be worst-case for exhaust emission compliance on candidate in-use vehicles (40 C.F.R. § 86.1828-01(a)). The undisclosed AECDs changed the vehicle configuration such that the EDVs were not of a configuration which is “expected to be worst-case for exhaust emissions.”

For MY 2015 and subsequent model year vehicles, California Code of Regulations, title 13, section 1961.2(d) incorporates by reference the 2015 Test Procedures, which incorporate the same regulatory requirements that apply to the MY 2014 vehicles,
described above. The undisclosed AECDs changed the vehicle configuration such that the EDVs were not of a “configuration which is expected to generate the highest level of exhaust emission deterioration.”

8. Failure to comply with onboard diagnostic (OBD) system requirements

The purpose of OBD system requirements is to “reduce motor vehicle and motor vehicle engine emissions by establishing emission standards and other requirements for onboard diagnostic systems... The use and operation of OBD systems will ensure reductions in in-use motor vehicle and motor vehicle engine emissions through improvements of emission system durability and performance” (Cal. Code Regs., tit. 13, § 1968.2, subd. (a)).

While CARB has not fully evaluated the undisclosed AECDs with respect to the OBD system, AECD #8 listed in Table 2 is not properly monitored and therefore not compliant with OBD regulations. Section (f)(16.4) states “For emission control strategies that are not covered under sections (f)(1) through (f)(13) (e.g., a control strategy that regulated SCR catalyst inlet temperatures within a target window), Executive Officer approval shall be based on the effectiveness of the plan in detecting malfunctions that prevent the strategy from operating in its intended manner.”

For MY 2014 through 2016 vehicles, California Code of Regulations, title 13, section 1968.2, subdivisions (a) & (f) required manufacturers to implement OBD systems. These OBD systems must have: monitored emission systems in-use; detected malfunctions of the monitored emission systems as reported to CARB in the manufacturer’s certification application; stored pending or confirmed fault codes; and illuminated a malfunction indicator light (MIL) when and after emissions exceed levels specified in the applicable requirements. Additionally, in order to obtain certification, California Code of Regulations, title 13, section 1968.2, subdivision (h) required, and continues to require, manufacturers to submit emission test data from one or more durability demonstration test vehicles for single fault testing based on the applicable test with the specified components/systems set at their malfunction criteria limits, as determined by the manufacturer for meeting the requirements of section (f).

9. Invalid Vehicle Emission Control Information Label (compliance statement)

For MY 2014 vehicles, California Code of Regulations, title 13, section 1965 requires emission control labels as specified in the 2001-2014 Test Procedures. The 2001-2014 Test Procedures require a statement indicating that the vehicle conforms to applicable California regulations. However, placement of such a statement on vehicles which, in fact, do not comply with all applicable California regulations is prohibited.

For MY 2015-2016 vehicles, California Code of Regulations, title 13, section 1965 requires emission control labels as specified in the 2015 Test Procedures. The 2015 Test
Procedures require a statement indicating that the vehicle conforms to applicable California regulations. However, placement of such a statement on vehicles which, in fact, do not comply with all applicable California regulations is prohibited.

10. Invalid smog rating on the Smog Index Label

For MY 2014 through MY 2016 vehicles, California Code of Regulations, title 13, section 1965 requires smog index labeling to conform with the requirements in the “California Environmental Performance Label Specifications for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles” (2009 Smog Label Specifications). The 2009 Smog Label Specifications prohibit the sale of any 2009 and subsequent vehicles with an incorrect smog index label. FCA’s use of the previously undisclosed AECDs generated emissions in excess of what FCA claimed. FCA affixed labels to its vehicles with incorrect smog indices that were based on emissions of the vehicles while the previously undisclosed AECDs were activated.

11. Violation of emission warranty provisions

Health and Safety Code section 43205 requires manufacturers to warrant that their motor vehicles and motor vehicle engines meet certain requirements, including that they are designed, built, and equipped to conform to applicable emission standards; that they are free from defects that cause the vehicle or engine to fail to conform to applicable requirements; and that they are free from defects in emission related parts. California Code of Regulations, title 13, section 2037 also requires that manufacturers make certain warranty statements, including that the engines it manufactures are designed, built, and equipped so as to conform with all applicable regulations adopted by CARB; and are free from defects in materials and workmanship which cause the failure of a warranted part to be identical in all material respects to the part as described in the vehicle or engine manufacturer's application for certification.

FCA submitted certification applications to CARB for its MY 2014 through MY 2016 3.0L diesel motor vehicles. FCA made the aforementioned required warranties, and included warranty statements with each vehicle. However, FCA designed, built, and equipped the MY 2014 through MY 2016 3.0L diesel motor vehicles with previously undisclosed AECDs which caused NOx emissions to exceed State standards. FCA’s vehicle engines were not identical in many material respects to those described in its application for certification. Thus, FCA violated the emission warranty provisions.

Other violations may be discovered by CARB during its ongoing investigation, and will also be addressed by the agency pursuant to State law. CARB reserves all rights to amend this NOV, or issue another, to add additional violations as they become known to CARB.
B. Definitions


"Defeat Device" means any AECD that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, unless: 1) Such conditions are substantially included in the Federal emission test procedure; 2) The need for the AECD is justified in terms of protecting the vehicle against damage or accident; 3) The AECD does not go beyond the requirements of engine starting; or 4) The AECD applies only for emergency vehicles and the need is justified in terms of preventing the vehicle from losing speed, torque, or power due to abnormal conditions of the emission control system, or in terms of preventing such abnormal conditions from occurring, during operation related to emergency response. (“California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” as amended December 6, 2012 and “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” as amended September 2, 2015, which incorporate 40 CFR § 86.1803-01).

"Test Group" means the basic classification unit within a durability group used for the purpose of demonstrating compliance with exhaust emission standards in accordance with 40 CFR § 86.1841-01 (40 CFR § 86.1803-01).

C. Selected Legal Requirements Applicable to the Violations

For convenience, some of the applicable legal requirements appear below.

Health and Safety Code section 43105. Violation of standards or test procedures; Recall of vehicles

“No new motor vehicle, new motor vehicle engine, or motor vehicle with a new motor vehicle engine required pursuant to this part to meet the emission standards established pursuant to Section 43101 shall be sold to the ultimate purchaser, offered or delivered for sale to the ultimate purchaser, or registered in this state if the manufacturer has violated emission standards or test procedures and has failed to take corrective action, which may include recall of vehicles or engines, specified by the state board in accordance with regulations of the state board. If a manufacturer contests the necessity for, or the scope of, a recall of vehicles or engines ordered pursuant to this section and so advises the state board, the state board shall not require such recall unless it first affords the manufacturer the opportunity, at a public hearing, to present evidence in support of the manufacturer's objections. If a vehicle or engine is recalled pursuant to this section, the manufacturer shall make all necessary corrections specified by the state board without charge to the registered owner of the vehicle or vehicle with such engine or, at the manufacturer's election, reimburse the registered owner for the cost of making such necessary corrections.

The procedures for determining, and the facts constituting, compliance or failure of compliance shall be established by the state board."

Health and Safety Code section 43151. Acquisition of vehicle or engine outside of the state

“No person who is a resident of, or who operates an established place of business within, this state shall import, deliver, purchase, rent, lease, acquire, or receive a new motor vehicle, new motor vehicle engine, or motor vehicle with a new motor vehicle engine for use, registration, or resale in this state unless such motor vehicle engine or motor vehicle has been certified pursuant to this chapter. No person shall attempt or assist in any such action.”
Health and Safety Code section 43152. Acquisition of non-certified vehicle or engine for sale or resale

“No person who is engaged in this state in the business of selling to an ultimate purchaser, or renting or leasing new motor vehicles or new motor vehicle engines, including, but not limited to, manufacturers, distributors, and dealers, shall intentionally or negligently import, deliver, purchase, receive, or otherwise acquire a new motor vehicle, new motor vehicle engine, or vehicle with a new motor vehicle engine which is intended for use primarily in this state, for sale or resale to an ultimate purchaser who is a resident of or doing business in this state, or for registration, leasing or rental in this state, which has not been certified pursuant to this chapter. No person shall attempt or assist in any such act.”

Health and Safety Code section 43153. Sale or lease of non-certified vehicle or engine

“No person who is engaged in this state in the business of selling to an ultimate purchaser or renting or leasing new motor vehicles or new motor vehicle engines, including, but not limited to, manufacturers, distributors, and dealers, shall intentionally or negligently sell, or offer to sell, to an ultimate purchaser who is a resident of or doing business in this state, or lease, offer to lease, rent, or offer to rent, in this state any new motor vehicle, new motor vehicle engine, or vehicle with a new motor vehicle engine, which is intended primarily for use or for registration in this state, and which has not been certified pursuant to this chapter. No person shall attempt or assist in any such action.”

Health and Safety Code section 43205. Warranty requirements for light and medium duty motor vehicles

“(a) Commencing with the 1990 model-year, the manufacturer of each light-duty and medium-duty motor vehicle and motor vehicle engine shall warrant to the ultimate purchaser and each subsequent purchaser that the motor vehicle or motor vehicle engine meets all of the following requirements:

(1) Is designed, built, and equipped so as to conform with the applicable emissions standards specified in this part.

(2) Is free from defects in materials and workmanship which cause the motor vehicle or motor vehicle engine to fail to conform with applicable requirements specified in this part for three years or 50,000 miles, whichever first occurs.

(4) Is free from defects in materials and workmanship in emission related parts which, at the time of certification by the state board, are estimated by the manufacturer to cost individually more than three hundred dollars ($300) to replace, for a period of seven years or 70,000 miles, whichever first occurs.”
Health and Safety Code section 43211. Sale of noncomplying vehicle; Penalty

“No new motor vehicle shall be sold in California that does not meet the emission standards adopted by the state board, and any manufacturer who sells, attempts to sell, or causes to be offered for sale a new motor vehicle that fails to meet the applicable emission standards shall be subject to a civil penalty of five thousand dollars ($5,000) for each such action. Any penalty recovered pursuant to this section shall be deposited into the general fund”.

Health and Safety Code section 43212. Failure to comply with standards or procedures; Penalty

“Any manufacturer or distributor who does not comply with the emission standards or the test procedures adopted by the state board shall be subject to a civil penalty of fifty dollars ($50) for each vehicle which does not comply with the standards or procedures and which is first sold in this state. The payment of such penalties to the state board shall be a condition to the further sale by such manufacturer or distributor of motor vehicles in this state. Any penalty recovered pursuant to this section shall be deposited into the Air Pollution Control Fund”.


“(a) Purpose.
The purpose of this regulation is to reduce motor vehicle and motor vehicle engine emissions by establishing emission standards and other requirements for onboard diagnostic systems (OBD II systems) that are installed on 2004 and subsequent model-year passenger cars, light-duty trucks, and medium-duty vehicles and engines certified for sale in California. The OBD II systems, through the use of an onboard computer(s), shall monitor emission systems in-use for the actual life of the vehicle and shall be capable of detecting malfunctions of the monitored emission systems, illuminating a malfunction indicator light (MIL) to notify the vehicle operator of detected malfunctions, and storing fault codes identifying the detected malfunctions. The use and operation of OBD systems will ensure reductions in in-use motor vehicle and motor vehicle engine emissions through improvements of emission system durability and performance”.


“(b) General Emissions Warranty Coverage.
The manufacturer of each motor vehicle or motor vehicle engine shall warrant to the ultimate purchaser and each subsequent purchaser that the vehicle or engine is:
(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board pursuant to its authority in chapters 1 and 2, part 5, division 26 of the Health and Safety Code; and

(2) Free from defects in materials and workmanship which cause the failure of a warranted part to be identical in all material respects to the part as described in the vehicle or engine manufacturer's application for certification, including any defect in materials or workmanship which would cause the vehicle's on-board diagnostic malfunction indicator light to illuminate, for a period of three years or 50,000 miles, whichever first occurs; and

(3) Free from defects in materials and workmanship which cause the failure of a warranted part described in section (c) below for seven years or 70,000 miles, whichever first occurs”.

**Code of Federal Regulations, Title 40, section 86.1809-01. Prohibition of defeat devices.**

“(a) No new light-duty vehicle, light-duty truck, or complete heavy-duty vehicle shall be equipped with a defeat device”.

**Code of Federal Regulations, Title 40, section 86.1809-10. Prohibition of defeat devices.**

“(a) No new light-duty vehicle, light-duty truck, medium-duty passenger vehicle, or complete heavy-duty vehicle shall be equipped with a defeat device”.

**Code of Federal Regulations, Title 40, section 86.1809-12. Prohibition of defeat devices.**

“(a) No new light-duty vehicle, light-duty truck, medium-duty passenger vehicle, or complete heavy-duty vehicle shall be equipped with a defeat device.

(d) The following provisions apply for vehicle designs designated by the Administrator to be investigated for possible defeat devices:

(1) The manufacturer must show to the satisfaction of the Administrator that the vehicle design does not incorporate strategies that unnecessarily reduce emission control effectiveness exhibited during the Federal Test Procedure or Supplemental Federal Test procedure (FTP or SFTP) or the Highway Fuel Economy Test Procedure (described in subpart B of 40 CFR part 600), or the Air Conditioning Idle Test (described in 86.165-12), when the vehicle is operated under conditions that may reasonably be expected to be encountered in normal operation and use”. 

“(a) Within each durability group, the vehicle configuration which is expected to generate the highest level of exhaust emission deterioration on candidate vehicles in use, considering all constituents, shall be selected as the durability data vehicle configuration. The manufacturer will use good engineering judgment in making this selection”.

Code of Federal Regulations, Title 40, section 86.1823-08. Durability demonstration procedures for exhaust emissions.

“(b) Required durability demonstration. Manufacturers must conduct a durability demonstration for each durability group using a procedure specified in either paragraph (c), (d), or (e) of this section”.


“(a) FTP and SFTP testing. Within each test group, the vehicle configuration shall be selected which is expected to be worst-case for exhaust emission compliance on candidate in-use vehicles, considering all exhaust emission constituents, all exhaust test procedures, and the potential impact of air conditioning on test results. The selected vehicle will include an air conditioning engine code unless the worst-case vehicle configuration selected is not available with air conditioning. This vehicle configuration will be used as the EDV calibration”.

Code of Federal Regulations, Title 40, section 86.1829-01. Durability and emission testing requirements: waivers.

“(a) Durability demonstration.(1) One durability demonstration is required for each durability group.

(2) The configuration of the DDV is determined according to the provisions of § 86.1822–01.

(3) The DDV shall be tested and accumulate service mileage according to the provisions of §§ 86.1831–01, 86.1823, 86.1824 and 86.1825. Small volume manufacturers and small volume test groups may optionally meet the requirements of § 86.1838–01.

(b) Emissions demonstration—

(1) FTP and SFTP Exhaust Testing—

(i) Testing at low altitude. One EDV shall be tested in each test group for exhaust emissions using the FTP and SFTP test procedures of subpart B of this part and the HFET test procedure of subpart B of part 600 of this chapter. The
configuration of the EDV will be determined under the provisions of § 86.1828–01 of this subpart.

(ii) Testing at high altitude. For high-altitude exhaust emission compliance for each test group, the manufacturer shall follow one of the following two procedures:

(A) One EDV shall be tested in each test group for exhaust emissions using the FTP test procedures of subpart B of this part. The configuration of the EDV will be determined under the provisions of § 86.1828–01; or

(B) In lieu of testing vehicles according to the provisions of paragraph (b)(1)(ii)(A) of this section, a manufacturer may provide a statement in its application for certification that, based on the manufacturer's engineering evaluation of appropriate high-altitude emission testing, all light-duty vehicles, light-duty trucks, and complete heavy-duty vehicles comply with the emission standards at high altitude."

**Code of Federal Regulations, Title 40, section 86.1829-15. Durability and emission testing requirements: waivers.**

“(a) One durability demonstration is required for each durability group. The configuration of the DDV is determined according to § 86.1822. The DDV shall be tested and accumulate service mileage according to the provisions of §§ 86.1823, 86.1824, 86.1825, and 86.1831. Small-volume manufacturers and small-volume test groups may optionally use the alternative durability provisions of § 86.1838.

(b) The manufacturer must test EDVs as follows to demonstrate compliance with emission standards:

(1) Test one EDV in each durability group using the test procedures in 40 CFR part 1066 to demonstrate compliance with cold temperature CO and NMHC exhaust emission standards.

(2) Test one EDV in each test group using the FTP, SFTP, and HFET test procedures in 40 CFR part 1066 to demonstrate compliance with other exhaust emission standards.

(3) Test one EDV in each evaporative/refueling family and evaporative/refueling emission control system combination using the test procedures in subpart B of this part to demonstrate compliance with evaporative and refueling emission standards.”

**Code of Federal Regulations, Title 40, section 86.1844-01. Information requirements: Application for certification and submittal of information upon request.**

“(d) Part 1 Application. Part 1 must contain the following items:...
(5) A description of each test group in accordance with the criteria listed in §86.1827-01 or as otherwise used to group a product line….

(11) A list of all auxiliary emission control devices (AECD) installed on any applicable vehicles, including a justification for each AECD, the parameters they sense and control, a detailed justification of each AECD that results in a reduction in effectiveness of the emission control system, and rationale for why it is not a defeat device as defined under §86.1809. The following specific provisions apply for AECDs:

(i) For any AECD uniquely used at high altitudes, EPA may request engineering emission data to quantify any emission impact and validity of the AECD.

(ii) For any AECD uniquely used on multi-fuel vehicles when operated on fuels other than gasoline, EPA may request engineering emission data to quantify any emission impact and validity of the AECD…

(e) Part 2 Application. Part 2 must contain the following items:…

(2) Basic calibration information, organized by engine code (or other similar classification scheme), for the major components of the fuel system, EGR system, ignition system, oxygen sensor(s) and thermostat. Examples of major components and associated calibration information include, but are not limited to; fuel pump and fuel pump flow rate, fuel pressure regulator and regulated fuel pressure, EGR valve and EGR exhaust gas flow rate at specified vacuum levels, EGR vacuum regulator and regulated vacuum, EGR orifice and orifice diameter, basic engine timing, timing RPM, idle rpm, spark plug gap, oxygen sensor output (mV), and thermostat opening temperature.

(g) The manufacturer shall provide the following information, or other information as deemed necessary by the Administrator, to the Agency upon written request by the Administrator. This includes any information, or explanations of such information specified in paragraphs (d), (e), and (f) of this section….

(5) Any information necessary to demonstrate that no defeat devices are present on any vehicles covered by a certificate including, but not limited to, a description of the technology employed to control CO emissions at intermediate temperatures, as applicable."