

**State of California**  
**AIR RESOURCES BOARD**

**PROCEDURES FOR EXEMPTION OF ADD-ON AND MODIFIED PART(S) FOR  
ON-ROAD VEHICLES/ENGINES**

**Adopted: June 29, 2021**

## I. APPLICABILITY

These procedures apply to any entity that manufactures add-on or modified parts, as defined in California Code of Regulations (CCR), Title 13, Section 1900 (b), (1) and (14). Add-on or modified part(s) that satisfy the criteria as set forth in these procedures shall be issued an Executive Order by the Executive Officer that exempts the add-on or modified parts from the prohibitions of Section 27156 of the California Vehicle Code.

These procedures do not affect the provisions of CCR Title 13, Section(s) 2030, Liquefied Petroleum Gas or Natural Gas Retrofit Systems, 2031, Alcohol or Alcohol/Gasoline Fuels Retrofit Systems, 2222 (a)-(d) and (f)-(k) and 2224 (a), Aftermarket Parts, 2470 - 2476 Certification Procedures for Aftermarket Parts for Off-Road Vehicles, Engines, Equipment, and 2700 - 2711, Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines.

## II. DEFINITIONS

**The definitions in Section 1900(b), Chapter 3, Title 13 of the California Code of Regulations shall apply with the following additions:**

“Adjustment Factors” means a numerical value added, multiplied, or subtracted to measured emissions for determining compliance with the emission standards.

“Baseline levels” are the benchmark emission levels from a vehicle or engine in a configuration certified by the original equipment manufacturer (OEM).

“Calibration Identification Code” (CAL ID) identifies the particular version of software in the electronic control module as reported by the control module through the vehicle diagnostic link as required by Title 13, CCR, sections 1968.2(h)(4.6) and 1971.1(h)(4.6).

“Calibration Verification Number” (CVN) is computed and reported by the electronic control module to verify the integrity of the data in the electronic control module as required by Title 13, CCR, sections 1968.2(h)(4.7) and 1971.1(h)(4.7).

“California Certified Vehicle or Engine” is a motor vehicle or engine that is covered by an Executive Order issued by the California Air Resources Board.

“California Smog Check Program” or “Smog Check Inspection” means the emissions inspection and maintenance program as set forth in Chapter 5, Part 5, Division 26 of the California Health and Safety Code.

“Certification Emission Standards” means California new vehicle or engine

emission standards used by the original vehicle or engine manufacturer for certification.

“Days” means business days, unless otherwise noted.

“Deterioration Factors” means the numerical values added to or multiplied with measured emissions for determining compliance with the emission standards through the vehicle or engine’s useful life period.

“Device” means a manufacturer’s add-on or modified part as described in an exemption request application or Executive Order.

“Drivability” means vehicle or engine performance during in-use driving conditions such as acceleration, cruise, idle, or cold-start operation.

“Emission Control System” or “ECS” means the pollution control components on a vehicle or engine at the time of test group or engine family certification. The emission control label is part of the vehicle or engine’s emission control system.

“Emission Standards” are the legal limits on the amount of specific air pollutants released from the vehicle or engine over a specific interval (e.g., distance traveled, brake horsepower hour, etc.).

“Engine Configuration” describes the set of common engine operating characteristics (e.g., method of aspiration) and engine design (e.g., cylinder count).

“Executive Officer” means the Executive Officer of the California Air Resources Board or his or her authorized representative or designee.

“Evaporative Testing” refers to the procedures set forth in “California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles”, amended September 2, 2015, incorporated by reference herein.

“Federal Test Procedure” (FTP) refers to the certification tailpipe exhaust emission standards and test procedures applicable to the class to which a vehicle or engine is certified as referenced in California Code of Regulations, Title 13, Sections 1960.1, 1961.2, and 1956.8.

“Fill Pipe Testing” refers to the procedures set forth in “Specifications for Fill Pipes and Openings of 2015 and Subsequent Model Motor Vehicle Fuel Tanks,” as of October 1, 2019 (last amended May 31, 2019), incorporated by reference herein.

“Gross Vehicle Weight Rating” (GVWR) means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle, consistent with good engineering judgement as referenced in Code of Federal Regulations, Title 40, Section 86.1803-01, amended October 25, 2016, incorporated by reference herein.

“Highway Fuel Economy Test” (Highway Testing) means the test described in the

California Code of Regulations, Title 13, Sections 1960.1, 1961 and 1961.2.

“In-Use Monitoring Performance Ratios” means the ratio testing of monitors as referenced in California Code of Regulations, Title 13, Sections 1968.2 (d)(4) and 1971.1(d)(4).

“Malfunction Indicator Light” (MIL) refers to the dashboard symbol that, when illuminated or blinking, indicates a fault in the emission control system as referenced in California Code of Regulations, Title 13, Sections 1968.2 (d)(2) and 1971.1(d)(2).

“Manufacturer” means any entity with design control that manufactures add-on or modified parts.

“Not-To-Exceed test” (NTE) means the heavy-duty engine test cycle, described in the California Code of Regulations, Title 13, Section 1956.8.

“On-Board Diagnostic System” (OBD) is a system that manufacturers develop and implement to meet vehicle or engine self-diagnosis and reporting capabilities as referenced in California Code of Regulations, Title 13, Sections 1968.2 (d)(1) and 1971.1(d)(1).

“Refueling Testing” refers to the procedures set forth in “California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles,” adopted August 5, 1999 (last amended September 2, 2015), incorporated by reference herein.

“Road Load” means the force that opposes the movement of a vehicle during on-road driving.

“SC03 Supplemental Federal Test Procedure” (SC03) sets forth the procedures for measuring vehicle emissions while air conditioning is in operation, as described in the California Code of Regulations, Title 13, Sections 1960.1, 1961 and 1961.2. “AC2” is an alternate test cycle to the SC03, as described in the Code of Federal Regulations, Title 40, Section 86.162–00, amended July 1, 2012, incorporated by reference herein.

“Steady State testing” (Steady State) means the heavy-duty engine test cycle, described in the California Code of Regulations, Title 13, Sections 1956.8 and 2208.

“Supplemental Emissions Test” (SET) means the heavy-duty engine test cycle, described in the California Code of Regulations, Title 13, Section 1956.8.

“US06 Supplemental Federal Test Procedure” (US06 or US06 SFTP) means the test cycle, described in the California Code of Regulations, Title 13, Sections 1960.1, 1961 and 1961.2.

“Vehicle Identification Number” (VIN) means a series of letters and numbers that is assigned to a motor vehicle for identification purposes as referenced in the Code of Federal Regulations, Title 49, Part 565, amended April 30, 2008, incorporated by reference herein.

“World Motorcycle Test Cycle” (WMTC) is a simulated motorcycle driving cycle conducted on a dynamometer to measure exhaust emissions as referenced in Regulation (EU) No. 168/2013, dated January 15, 2013, incorporated by reference herein.

### III. APPLICATION SUBMISSION REQUIREMENTS

**California Air Resources Board (CARB) requires a manufacturer to complete all the requirements listed in this section when requesting an exemption for a device.**

#### (a) Category Selection

A manufacturer must choose **only one** of the following categories that best describes the device or request for exemption. If an application is outside the scope of the selected category, the Executive Officer will redirect the application to the appropriate category.

#### (1) Category I – Part Number(s) or Name Change(s), Model-Year Additions on Carryover Vehicle(s) or Engine(s), Private Label(s), Extending Coverage to Subsidiaries, or Consolidation of Executive Orders.

A device that has been previously issued an exemption Executive Order and for which the application is only requesting one of the following actions: adding part number(s), changing device name(s), adding model-years for carryover vehicle(s) or engine(s), modifying or adding private label(s), extending coverage to subsidiaries, or consolidating previously issued exemption Executive Orders.

#### (2) Category II – Air Intake Kits or Modifications

Air Intake kits or modifications made to the stock air intake system that are not applicable to Category VIII and include no other parts or modifications for proper installation. Category IX should be selected for the application if other parts or modifications are included.

#### (3) Category III – Engine Control Module (ECM) Programmers or ECM Signal Modifications

New ECM calibrations or ECM signal modifications that include no other parts or modifications for proper installation. Category IX should be selected for the application if other parts or modifications are included.

(4) Category IV – Fuel Tanks or Fuel Tank Modifications

New fuel tanks or modifications made to the stock fuel tank, including hoses and lines.

(5) Category V – Intercooler Kits, Intercooler Components or Modifications

Intercooler kits, intercoolers, intercooler pipes or tubes, or modifications made to the stock intercooler systems that include no other parts or modifications for proper installation. Category IX should be selected for the application if other parts or modifications are included.

(6) Category VI – Supercharger and Turbocharger Kits or Modifications

Supercharger and Turbocharger kits or modifications made to a stock supercharger or turbocharger.

(7) Category VII – Pre-Catalyst Exhaust Components

Exhaust components installed upstream of any catalytic converter(s) such as headers, connecting pipes, exhaust manifolds, and turbine inlet and outlet pipes, that are not covered by Category VIII. No other parts or modifications can be required or included for proper installation under this category. Category IX should be selected for the application if other parts or modifications are included.

(8) Category VIII – Other Categorized Parts

This category is for add-on or modified parts that fit in one of the following descriptions:

- (A) Air Filter Rams (e.g., dirty side air intake funnel, retaining stock air box lid)
- (B) Air Cleaner Kits for motorcycles (not equipped with an original equipment manufacturer (OEM) HC trap)
- (C) Automatic Transmission Shift Kits (no change in shift points)
- (D) Exhaust or Transmission Braking Systems
- (E) Ignition Coils, Spark Enhancers, Multi-spark Modules
- (F) Ignition Modules that replace stock ignition points

- (G) Ignition Distributors
- (H) Intake Manifolds (limited to vehicles or engines not equipped with an OBD II system or EGR valve)
- (I) Lift Pumps, Non-Adjustable Fuel Pumps, Fuel Pump Voltage Modifiers, or Fuel Pump Control Modules (only for vehicles or engines equipped with a downstream pressure regulator)
- (J) Pulley Kits (limited to non-supercharged vehicles or engines)
- (K) Axle Ratio Modifications (within a 3 percent N/V (engine speed to vehicle speed) ratio change from an OEM range option)
- (L) Exhaust Manifolds or Shorty Headers for 1995 and older vehicles or engines that retain the stock or direct fit connecting pipe(s). Applicable sensor(s), air injection and EGR ports must remain in a stock location and orientation.
- (M) Speedometer or Wheel Speed Adjusters
- (N) Throttle Bodies (without fuel injectors), Throttle Body Spacers, Throttle Body Elbows, or Carburetor Spacers
- (O) Torque Converters
- (P) Oil Separators (limited to diesel vehicles or engines only)

(9) Category IX – Add-On or Modified Part(s) Not Covered by Categories II through VIII.

Add-on or modified part(s) that do not fit the criteria set forth in Categories II through VIII above.

(b) Application Requirements. The application must contain:

- (1) Applicant name, mailing address, email address, and telephone number.  
Manufacturer name, mailing address, email address, and telephone number.  
Authorized Representative, mailing address, email address, and telephone number.
- (2) List of vehicles or engines that the manufacturer is including in the application to be covered by the Executive Order. The list must also include applicable vehicle or engine test groups, engine families, and evaporative families with corresponding CARB new vehicle or engine Executive Order number(s).
- (3) List of part numbers assigned by the manufacturer for each kit, each part contained in the kit, and each stand-alone part.
- (4) For each kit or stand-alone part number, step-by-step installation instructions with associated parts list, diagrams, pictures, and schematics for proper installation. Instructions that cover installation of more than one kit or stand-alone part number must have all applicable kits and part numbers clearly presented.

- (5) Detailed description of the device to assist CARB staff in understanding its operation, including technical operating principles, dimensional drawings, schematics, material specifications, and impacts to performance, fuel economy, drivability, emission control components, OBD, and emissions. Manufacturers shall include impacts to any affected OEM parts, components or systems, identified by part name and number. The detailed description must include the following affected parts, components, or systems for each category:

Category I – Part Number(s) or Name Change(s), Model-Year Additions on Carryover Vehicle(s) or Engine(s), Private Label(s), Extending Coverage to Subsidiaries, or Consolidation of Executive Orders.

See Sections VI (a-d) for requirements

Category II – Air Intake Kits or Modifications

Air induction system (e.g., air filter, air box, tubing, couplers, inlet ram)  
Crankcase breather hose and PCV system  
Sensors (e.g., signal modifications, location geometry, and functionality)  
Evaporative system (e.g., hydrocarbon trap)

Category III – Engine Control Module (ECM) Programmers or ECM Signal Modifications

ECM parameters (e.g., fuel tables, lambda tables, ignition advance and retard, parameters sensed and controlled, and adjustable settings)  
Transmission Control Module (TCM) parameters (e.g., shift points, shift pressure)  
Sensors (e.g., signal modifications, location geometry, and functionality)

Category IV – Fuel Tanks or Fuel Tank Modifications

Fuel system (e.g., fuel tank, fuel pump, fuel hoses, fuel filler pipe, thermal management devices, e.g., air deflectors, fuel insulation and radiant heat reflectors)  
Evaporative system (e.g., carbon canister, purge valves)  
Exhaust system and after-treatment  
Vehicle geometry (e.g., ground clearance)

Category V – Intercooler Kits, Intercooler Components or Modifications

Heat exchanger, intercooler, or EGR cooler  
Intercooler tubing or pipes  
Sensors (e.g., signal modifications, location, and functionality)

Category VI – Supercharger and Turbocharger Kits or Modifications



Any item listed in Category II (as applicable)  
Any item listed in Category III (as applicable)  
Any item listed in Category V (as applicable)  
Any item listed in Category VII (as applicable)  
Supercharger (e.g., unit type, size, and pulley diameter)  
Turbocharger (e.g., unit type, variable or fixed geometry, pneumatic or electronic waste gate, compressor and turbine impeller sizes, turbine housing area ratio (A/R), area of throat, and flange sizes)  
Boost pressure  
Fuel system (e.g., carburetor, fuel injectors, fuel pump, fuel pressure regulator)  
Drive pulley and belt system  
Ignition system and timing  
Throttle body and intake manifold

#### Category VII – Pre-Catalyst Exhaust Components

Exhaust system and after-treatment  
Exhaust manifold, header  
Upstream oxygen sensors (e.g., location geometry, and functionality)  
Turbine inlet and outlet pipes

#### Category VIII – Other Categorized Parts

Any applicable item listed in other Categories  
All affected parts, components, or systems found in this Category (see Section III (a)(8) for Other Categorized Parts)

#### Category IX – Add-On or Modified Part(s) Not Covered by Categories II through VIII

Add-on or modified part(s) that do not fit the criteria set forth in Categories II through VIII above.

- (6) A facsimile of the exemption label (see Section VIII for labeling requirements). Manufacturers with a previously issued exemption Executive Order must include an actual physical label with the first application submission of each calendar year.
- (7) Sample kit or part, only when needed to assist Executive Officer in understanding the device's operation and effects on emissions.
- (8) A plan to collect vehicle identification numbers from purchaser's vehicles for any device that modifies a stock engine, body, or transmission control module's software, excluding speedometer or wheel speed adjusters. The plan should describe any process the manufacturer will use to collect vehicle identification numbers from purchasers, how the numbers will be retained, and how the numbers will be transferred to the California Air Resources Board.

- (9) A signed attestation by the manufacturer of the following: That the information is true, accurate, and complete, and that to the best of the manufacturer's knowledge, installation of the device on a covered vehicle or engine will not cause regulated emissions to increase beyond the certification standards to which the vehicle or engine was certified including any noxious or toxic matter, and will not cause emission control components and OBD to function differently than as designed by the vehicle or engine manufacturer.

(c) Application and Letter of Intent Submissions

Manufacturers shall submit the completed application to the California Air Resources Board and shall be addressed to:

Chief  
Aftermarket Parts Certification and Audit Branch  
California Air Resources Board  
4001 Iowa Avenue  
Riverside, California 92507

It is recommended, by January 30 of each year, manufacturers with a previously issued exemption Executive Order, planning to submit more than one exemption application during the next 12 month period, should also send a "Letter of Intent." The Letter of Intent should include general information on the manufacturer's proposed device submissions during the next 12 months. It should also include a detailed description of each device, the applicability of each device, scope of vehicle or engine coverage, timing of submissions, and the single point contact authorized to communicate with CARB staff during the exemption process. Upon receiving the "Letter of Intent", CARB staff will contact the manufacturer to review proposed submissions. New manufacturers are encouraged to submit a Letter of Intent with first application submission.

(d) Vehicle or Engine Coverage Requirements

- (1) Applications for an exemption, excluding Category I applications, must be prepared and organized according to the scope criteria listed below to be considered complete, except when variations in the criteria exist within the same test group or engine family (e.g., vehicle or engine variations within a test group that span vehicle or engine classes):
  - (A) Single original equipment vehicle or engine manufacturer
  - (B) Same vehicle or engine class
  - (C) Same engine configuration (e.g., I4, V6, V8, method of aspiration)
  - (D) Same fuel type (flex-fuel is included with gasoline)
  - (E) Same emissions control technologies as listed on vehicle or engine certification Executive Order.
  - (F) Same emission standards
- (2) If applicable, a list of vehicle or engine models the manufacturer voluntarily

excludes from the submitted application. The list shall include test groups, engine families, and evaporative families for excluded models with applicable California new vehicle or engine certification Executive Order number(s).

#### **IV. EVALUATION AND TESTING CRITERIA**

The criteria for evaluating an exemption application and the prescribed tests and evaluations required for specified categories are set forth below. These sections set forth a description of the required minimum tests and evaluations to be performed for device review. Additional tests and evaluations shall be required if the Executive Officer determines through engineering analysis that the potential exists for an interaction between the device and vehicle or engine operation or design that will negatively impact drivability and performance, durability, OBD system operation, or emissions and emission controls under conditions not covered by the prescribed tests and evaluations.

##### **(a) Drivability and Performance**

If the device(s) potentially degrades the drivability or performance of a covered vehicle or engine (e.g., during acceleration, cruise, idle, or cold-start conditions), such that a vehicle or engine owner would be encouraged to tamper with the device(s) or the host vehicle or engine, the Executive Officer shall request the manufacturer to demonstrate adequate drivability and performance.

##### **(b) Durability**

If the Executive Officer determines through engineering analysis that either:

- (1) An add-on or modified part (entire kit or component(s) of kit) would affect the durability of any covered emissions control system, or
- (2) The quality of workmanship of the add-on or modified parts is inadequately durable when compared to the part(s) or system(s) replaced, potentially resulting in early failure, increased emissions, or engine damage or failure.

Then the manufacturer shall submit data to demonstrate that the durability of the vehicle or engine and the emission control systems will not be negatively affected.

##### **(c) On-Board Diagnostic Requirements**

The manufacturer shall be responsible for ensuring that the device(s) will not affect the performance of the OBD system on applicable vehicles or engines. This includes at a minimum, affecting the OBD system's ability to detect malfunctions of monitored components and systems, affecting the OBD system's ability to store and erase fault codes, affecting the OBD system's ability to illuminate and extinguish the malfunction indicator light, and affecting the vehicle's ability to successfully undergo an inspection and maintenance evaluation (e.g., Smog

Check).

(d) Testing and Evaluation Requirements for passenger cars, light-duty trucks, and medium or heavy duty vehicles with a gross vehicle weight rating (GVWR)  $\leq$  14,000 lbs. (vehicles up to 16,000 GVWR if included in the certified test group). For Category I evaluation requirements, see Section VI (a-d).

**(1) Categories II and V - Air Intake Kits or Modifications and Intercooler Kits, Intercooler Components or Modifications**

**(A) No OEM sensors (excluding temperature sensors)** located in stock or modified parts.

1. Required tests: US06 and OBD evaluation.
  - a. Evaporative testing will also be required if the Executive Officer determines, based on an engineering analysis, that such emissions are impacted by the device.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstrated compliance with the composite standard created by using FTP and SC03 new vehicle certification values.
  - c. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(B) With OEM Sensor(s)** located in stock and modified parts.

1. Required tests: FTP, US06, and OBD. For vehicles with a composite standard, the SC03 test shall also need to be performed. Evaporative testing will also be required if the Executive Officer determines, based on an engineering analysis, that such emissions are impacted by the device.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(2) Category III - ECM Programmers or ECM Signal Modifications**

**(A) With no end user adjustability:**

1. Required tests: FTP, US06, and OBD. For vehicles with a composite standard, the SC03 test shall also be performed. If the device's operation is not demonstrated over the required test cycles, the Executive Officer will also require Highway or Steady State testing.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are

comparable to baseline levels, see Section V (b)(2).

- (B) If the device provides user adjustability, the Executive Officer shall require the above testing to be conducted in a worst case device setting or settings, e.g., each user-adjustable parameter adjusted to have the greatest probability of impacting emissions.

**(3) Category IV - Fuel Tanks or Fuel Tank Modifications**

- (A) No changes made to stock sensors or exhaust configuration:
  - 1. Required tests: Evaporative, Refueling, and OBD. If changes are made to the stock fill pipe, the Executive Officer will also require fill pipe testing.
  - 2. Ways to evaluate:
    - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
    - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).
- (B) With changes made to stock sensors or exhaust configuration:
  - 1. Required tests: FTP, US06, SC03, Evaporative, Refueling, and OBD. If changes are made to the stock fill pipe, the Executive Officer will also require fill pipe testing.
  - 2. Ways to evaluate:
    - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
    - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(4) Category VI - Supercharger and Turbocharger Kits or Modifications**

- (A) With no end user adjustability:
  - 1. Required tests: FTP, US06, SC03, and OBD. If the device's operation is not demonstrated over the required test cycles, the Executive Officer will also require Highway or Steady State testing, evaporative testing will also be required if the Executive Officer determines, based on an engineering analysis, that such emissions are impacted by the device.
  - 2. Ways to evaluate:
    - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
    - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).
- (B) If the device provides user adjustability, the Executive Officer shall require the above testing to be conducted in a worst case device setting or settings, e.g., each user-adjustable parameter adjusted to have the

greatest probability of impacting emissions.

**(5) Category VII - Pre-Catalyst Exhaust Components**

1. Required tests: FTP and OBD.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(6) Category VIII - Other Categorized Parts**

1. Required test: OBD (if OBD equipped).
2. Ways to evaluate:
  - a. Engineering Analysis.

**(7) Category IX - Add-On or Modified Part(s) Not Applicable to Categories II through VIII**

1. Testing requirements will be based on the Executive Officer's review of submitted application.

(e) Testing and Evaluation Requirements for Motorcycles. For Category I evaluation requirements, see Sections VI (a-d) for eligibility requirements.

**(1) Category III - ECM Programmers or ECM Signal Modifications**

(A) With no end user adjustability:

1. Required tests: FTP and WMTC.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

(B) If the device provides user adjustability, the Executive Officer shall require the above testing to be conducted in a worst case device setting or settings, e.g., each user-adjustable parameter adjusted to have the greatest probability of impacting emissions.

**(2) Category IV - Fuel Tanks or Fuel Tank Modifications**

1. Required tests: Evaporative.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(3) Category V - Intercooler Kits, Intercooler Components or Modifications**

1. Required test: FTP. If the device's operation is not demonstrated over the required test cycle, the Executive Officer will also require the WMTC.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(4) Category VI - Supercharger and Turbocharger Kits or Modifications**

**(A) With no end user adjustability:**

1. Required tests: FTP and WMTC.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(B)** If the device provides user adjustability, the Executive Officer shall require the above testing to be conducted in a worst case device setting or settings, e.g., each user-adjustable parameter adjusted to have the greatest probability of impacting emissions.

**(5) Category VIII - Other Categorized Parts**

1. Engineering Analysis.

**(6) Category IX - Add-On or Modified Part(s) Not Applicable to Categories II through VIII**

1. Testing requirements will be based on the Executive Officer's review of submitted application.

- (f) Testing and Evaluation Requirements for Engines (engine dynamometer testing) intended for vehicles with GVWR > 14,000 lbs. For Category I evaluation requirements, see Sections VI (a-d) for eligibility requirements.

**(1) Categories II and V - Air Intake Kits or Modifications and Intercooler Kits, Intercooler Components or Modifications**

1. Required tests: FTP and OBD evaluation. If the device's operation is not demonstrated over the required test cycles, the Executive Officer will also require SET or NTE testing.
  - a. Evaporative testing will also be required if the Executive Officer determines, based on an engineering analysis, that such emissions are impacted by the device.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(2) Category III - ECM Programmers or ECM Signal Modifications**

(A) With no end user adjustability:

1. Required tests: FTP and OBD. If the device's operation is not demonstrated over the required test cycles, the Executive Officer will also require SET or NTE testing.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

- (B) If the device provides user adjustability, the Executive Officer shall require the above testing to be conducted in a worst case device setting or settings, e.g., each user-adjustable parameter adjusted to have the greatest probability of impacting emissions.

**(3) Category IV - Fuel Tanks or Fuel Tank Modifications**

(A) No changes made to stock sensors or exhaust configuration:

1. Required tests: Evaporative, as applicable, and OBD. Evaporative testing will be required if the Executive Officer determines, based on an engineering analysis, that such emissions are impacted by the device. If changes are made to the stock fill pipe, the Executive Officer will also require fill pipe testing.
2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards,



- see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).
- (B) With changes made to stock sensors or exhaust configuration.
- 1. Required tests: FTP, Evaporative as applicable, and OBD. If the device's operation is not demonstrated over the required test cycles, the Executive Officer will also require SET or NTE testing. If changes are made to the stock fill pipe, the Executive Officer will also require fill pipe testing.
  - 2. Ways to evaluate:
    - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
    - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

#### **(4) Category VI - Supercharger and Turbocharger Kits or Modifications**

- (A) With no end user adjustability:
- 1. Required tests: FTP and OBD. If the device's operation is not demonstrated over the required test cycles, the Executive Officer will also require SET or NTE testing, evaporative testing will also be required if the Executive Officer determines, based on an engineering analysis, that such emissions are impacted by the device.
  - 2. Ways to evaluate:
    - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
    - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).
- (B) If the device provides user adjustability, the Executive Officer shall require the above testing to be conducted in a worst case device setting or settings, e.g., each user-adjustable parameter adjusted to have the greatest probability of impacting emissions.

#### **(5) Category VII - Pre-Catalyst Exhaust Components**

- 1. Required tests: FTP and OBD. If the device's operation is not demonstrated over the required test cycles, the Executive Officer will also require SET or NTE testing.
- 2. Ways to evaluate:
  - a. Demonstrated compliance with certification emission standards, see Section V (b)(1).
  - b. Demonstration that emissions with the device installed are comparable to baseline levels, see Section V (b)(2).

**(6) Category VIII - Other Categorized Parts**

1. OBD only (if OBD equipped).
2. Engineering Analysis.

**(7) Category IX - Add-On or Modified Part(s) Not Applicable to Categories II through VIII**

1. Testing requirements will be based on the Executive Officer's review of submitted application.

**V. TEST VEHICLE OR ENGINE SELECTION AND TESTING**

The criteria for test vehicle or engine selection, evaluation criteria for emissions testing, additional or alternate testing, on-board diagnostic testing, vehicle or engine break-in requirements, and test laboratory report formatting are set forth below.

**(a) Vehicle or Engine Selection**

Manufacturers shall perform the testing in these procedures as prescribed by the Executive Officer. Manufacturers are allowed to perform testing prior to application submittal. However, if the vehicle(s) or engine(s) tested are not determined to be worst case, (see description below) requested vehicle or engine coverage can be affected. If test data are included with the initial application submission, submitted test data must be in the format described in Section V (e). If test data are not included with the initial application submission, and testing is required as outlined in Section IV, the Executive Officer will provide the manufacturer with an official test memo, which shall list test vehicle(s) or engine(s) and the testing protocol. Selected test vehicle(s) or engine(s) shall be the worst case configuration as defined in Section V (a)(1) of these procedures. Notwithstanding, other vehicle(s) or engine(s) within the same test group or engine family can be used if tested using determined worst case test parameters. A manufacturer can select an alternative test vehicle(s) or engine(s) than the one listed on the issued test memo, but opting for an alternative that is not representative of the worst case vehicle(s) or engine(s) will affect vehicle or engine coverage of the submitted application.

(1) The "worst case" test vehicle or engine selection, as determined by the Executive Officer, shall be based on all of the following:

- (A) Applicable emission standards.
- (B) Highest percentage of the new vehicle or engine certification emission results compared to the applicable emission standards.

- (C) Vehicle test weight and road or engine dynamometer loading producing the greatest stress on the emission related components as determined by the Executive Officer.
  - (D) Extent of modification and related effects.
- (2) The Executive Officer shall allow test vehicle(s) that are equipped with a California certified engine that was certified to the California heavy-duty engine exhaust emission standards in Title 13 Section 1956.8 and the incorporated test procedures to use the vehicle certification procedures incorporated in Title 13 Sections 1960.1, 1961 and 1961.2. The specific evaluation criteria for vehicle(s) tested herein shall be limited to the comparative test criteria of Section V (b)(2).

The equivalent test weight of the test vehicle(s) shall be equal to the vehicle's curb weight plus 3/4 of the difference between the GVWR and the curb weight of the vehicle. The road load horsepower settings shall be based on the frontal area of the test vehicle without modifications, or the settings can be based on the road load horsepower settings derived by the OEM for the same model.

#### (b) Emissions Testing Options

Manufacturers, when applicable, must declare at the time of application submission, one of the following emissions evaluation compliance methods:

1. Comparison against applicable emission standards, or 2. Comparison against baseline emission levels (comparative emissions testing). Further explanations of the two evaluation methods are below:

##### (1) Emission Standards

The manufacturer shall demonstrate compliance with these procedures by showing that the emissions from the test vehicle or engine with the device installed are in compliance with the same applicable California new vehicle or engine emission standards used by the OEM vehicle or engine manufacturer for certification. To demonstrate compliance with the applicable emission standards, measured emissions shall be adjusted by the appropriate deterioration and adjustment factor(s), as developed by the original vehicle or engine manufacturer for new vehicle or engine certification, for the model and model year of the test vehicle or engine. An assigned deterioration factor shall be provided by the Executive Officer if the original vehicle or engine manufacturer's certification did not include one. The deteriorated emissions test results shall be considered in compliance with these procedures only if they do not exceed the applicable California new vehicle or engine emission standards for the test vehicle or engine. The manufacturer shall be permitted only one duplicate emissions test on any unique emissions test cycle if the

initial emission test results fail to demonstrate compliance with these procedures. The results, including all applied deterioration and adjustment factors, will be averaged and the averaged values will be used for compliance evaluation purposes. The same type of California certified test fuel used at the time of new vehicle or engine certification shall be used for all tests. The Executive Officer shall allow higher octane California certified test fuel to be used when the manufacturer has required use of the higher octane fuel in the installation instructions. The Executive Officer shall supply appropriate test parameters for the particular vehicle or engine being tested.

## (2) Comparative Emissions Testing (Baseline vs Modified)

The manufacturer has the option to conduct comparative emissions tests to demonstrate compliance with these procedures. Two sets of emissions tests will be required (one baseline and one modified). A baseline emissions test is a test conducted with the test vehicle or engine in its as built original equipment manufacturer configuration. A modified emissions test is conducted with the test vehicle or engine in its modified state, i.e., with the device installed, following all installation instructions as provided by the manufacturer.

Each test vehicle or engine shall undergo an examination prior to the baseline test to detect and correct all possible defects, maintenance issues and deviations from the manufacturer's original emission related specifications. If the manufacturer needs to replace any emission related component, the Executive Officer should be notified, through written communication, to determine if the new component is a correct replacement and if it is subjected to the requirements of Section V (d). The baseline emissions of the test vehicle or engine should be within the applicable emission standards when within useful life. If beyond useful life, emissions must be similar to other vehicles or engines within that particular make, model, mileage, engine displacement, and model year. The Executive Officer shall supply appropriate test parameters for the particular vehicle or engine being tested.

If vehicle or engine emissions exceed the levels of other similar vehicles or engines, as mentioned above, during the baseline test, the manufacturer must make a full diagnostic evaluation of the vehicle or engine, make any appropriate repairs, and retest the vehicle or engine. If the Executive Officer determines through an engineering analysis that no other abnormal conditions of the engine or the emission controls are present, the vehicle or engine test results can be used for baseline establishment as representative of other unmodified California vehicles or engines. The baseline emissions data, from the approved vehicle or engine, shall be used for comparison against the test results when the device is installed. The manufacturer has the option to forego evaluation and repair of the vehicle or engine, and to instead replace the test vehicle or engine. The manufacturer must notify the Executive Officer of test vehicle or engine replacement. The replacement vehicle or engine is subject

to Vehicle or Engine Selection requirements as described in Section V (a).

Upon completion of baseline testing, no servicing, maintenance, or part replacement is to be made, with the exception of such actions that are in accordance with the written instructions provided with the application or stated in the test memo. The Executive Officer shall allow higher octane California certified test fuel to be used, for modified testing only, when the manufacturer has required use of the higher octane fuel in the installation instructions, e.g., supercharger kits.

Each vehicle or engine selected shall be tested in the baseline configuration first. The modified configuration can be tested first only if the Executive Officer determines based on an engineering analysis that baseline emissions are not impacted. All engine settings shall be adjusted to the vehicle or engine manufacturer's specifications in the unmodified configuration (baseline) test. After baseline testing, the device shall be installed by the test laboratory in accordance with the manufacturer's written installation instructions provided with the application. The Executive Officer shall release the vehicle or engine back to the manufacturer for the device installation only if the device installation is required to be performed by an approved installer of the device.

Except as provided for below, the difference between the modified emissions test results and the baseline emissions test results (measured in units as applicable to the test procedures) must not increase by more than 10.0 percent for each regulated pollutant. If the modified emissions test results are greater than 10.0 percent above the baseline for a pollutant, manufacturers may request Executive Officer acceptance of the results. The Executive Officer shall consider acceptance of comparison data showing greater than a 10.0 percent difference for purposes of granting an exemption if emission test results, with deterioration and adjustment factors added in, are below any existing emission standards for a vehicle or engine in a similar weight class. Emission component elements shall be grouped to the format of the test vehicle or engine's certification standards (e.g., HC+NO<sub>x</sub>).

Modified emissions tests must be completed within three months of the completed baseline emissions tests, and mileage accumulation shall not exceed 750 miles between the baseline and modified emissions tests. If these time and mileage accumulation standards are exceeded, the Executive Officer may only accept the application if a valid technical need exists, e.g., to complete OBD readiness monitors.

### (3) Additional or Alternate Testing

If the Executive Officer finds, through engineering analysis, that the emissions testing and evaluation criteria specified in Sections IV and V (b) are not adequate to characterize the emissions performance or durability of a device, the Executive Officer shall require alternate emissions, functional, or bench testing. If the Executive Officer requires such additional or alternate testing of vehicle(s) or engine(s), the Executive Officer shall list those tests in a test

memo that will be issued to the manufacturer.

(c) On-Board Diagnostic Testing

Manufacturers of a device, when required by these procedures, will perform demonstrations to evaluate any impact to the OBD system. These demonstrations include, at a minimum, validating that the OBD system sets readiness monitors as designed, and that the OBD system reports accurate data stream parameters to a scan tool meeting SAE J1978 specification or to a scan tool designed to communicate with an SAE J1939 network. Furthermore, manufacturers shall demonstrate that in-use monitoring performance of the OBD system is not affected, if the Executive Officer determines based on an engineering analysis that such demonstrations are needed.

(d) Vehicle or Engine Break-In Requirements

Each test vehicle or engine must be a California certified vehicle or engine with at least: 4,000 miles for a chassis dynamometer based vehicle, 3500 kilometers for a motorcycle, and 125 hours for a heavy-duty engine. In the event that a manufacturer acquires a vehicle or engine with less usage, mileage or hours can be increased by driving the vehicle on the road or by simulated road loads on a chassis or engine dynamometer. The Executive Officer shall allow test vehicle(s) or engine(s) with less mileage or hours if the manufacturer can demonstrate emissions stability. If a test vehicle or engine requires the replacement of an emission control component, prior to an emissions test, vehicle or engine break-in requirements will apply when the Executive Officer determines based on an engineering analysis that component break-in is needed.

(e) Test Laboratory

The manufacturer shall have any required testing performed at an independent laboratory properly equipped to conduct such tests. An OEM can use an in-house testing laboratory. The Executive Officer shall require test laboratories to provide information to demonstrate that its equipment, employee training and experience, processes, gases, standard operating procedures, and quality control and audit procedures are in compliance with applicable CARB emissions test procedures. The laboratories shall allow the Executive Officer to inspect their facilities prior to testing and to observe all phases of testing upon request. The test vehicle(s) or engine(s) shall be under the control of the laboratory for the entire test period unless the Executive Officer gives permission to release the test vehicle(s) or engine(s) to the manufacturer. Unauthorized return of the test vehicle(s) or engine(s) to the manufacturer during the test period will invalidate test results. At the conclusion of the test program, the independent laboratory shall present the Executive Officer a final report in the standardized format, as listed below:

- (1) Executive Summary
  - (A) Project Number (if applicable)
  - (B) Conducted For

- (C) Report Prepared By
- (D) Table of Contents
- (E) Test Results

(2) Project Overview

(3) Test Vehicle Information

- (A) Vehicle Identification Number, Stock Calibration Identification Code and Calibration Verification Number
- (B) Model-Year, Make, and Model
- (C) Engine Displacement, Configuration, Fuel Type, and Aspiration
- (D) Test Group or Engine Family
- (E) Evaporative Family
- (F) Tire Size
- (G) Body Configuration (e.g., 4 door, Convertible, Long Bed, etc.)
- (H) Drivetrain Configuration (e.g., front wheel drive, rear wheel drive, all-wheel drive, etc.)

(4) Test Device Information

- (A) Device
- (B) Device Manufacturer
- (C) Part Number
- (D) Device Description
  1. Settings or measurements as tested (e.g., performance mode, pulley sizes, pictures, etc.)
  2. Calibration Identification Code and Calibration Verification Number if changes are made to any ECM

(5) Test Sequence and Chronology

- (A) Test Memo Reference
- (B) Date
  1. All Test(s) or Task(s) performed

(6) Test Parameters

- (A) Test Type
- (B) Test Fuel
- (C) ETW (lb)
- (D) Test Coefficients
  1. A (ft-lb) track and set
  2. B (ft-lb/mph) track and set
  3. C (ft-lb/mph<sup>2</sup>) track and set

(7) On Board Diagnostic Compatibility

- (A) Monitors, Live Data, and Diagnostic Trouble Code Status
  1. at Vehicle Check in
  2. at Monitor reset
  3. at After mileage accumulation
  4. at Conclusion of test program

(B) Total miles driven to allow all On Board Diagnostic monitors to complete

(8) Test Results

(A) Exhaust Emission Standards (if chosen method of evaluation)

1. Test Cycle

- (a) Pollutants measured
- (b) Conversion factors used (e.g., NMOG to NMHC ratio)
- (c) Test results without deterioration factors
- (d) Applied deterioration factors (and infrequent regeneration factors, if applicable)
- (e) Results with deterioration factors
- (f) Applicable emission standard
- (g) Pass or Fail Evaluation
- (h) List of any maintenance and repairs performed

(B) Comparative Emissions Testing (if chosen method of evaluation)

1. Test Cycle

- (a) Pollutants measured
- (b) Baseline measured emissions
- (c) Modified measured emissions
- (d) Pass or Fail Evaluation
- (e) List of any maintenance and repairs performed

(9) Data Review

(A) Appendices

- 1. Emissions Test Summary Sheets
- 2. Quality Assurance Packets
  - (a) Vehicle Preconditioning Report
  - (b) Canister Worksheet (purge and fill)
  - (c) Dynamometer – ABC Derivation
- 3. Check-In Documents
- 4. On Board Diagnostic Data in xml or txt format, or an alternate format that the Executive Officer has determined to be an upgrade to xml or txt
- 5. Vehicle mileage log
  - (a) Date
  - (b) Driver

## VI. CRITERIA FOR CATEGORY I APPLICATION REQUESTS

The Executive Officer shall use good engineering analysis, along with required information submitted by the manufacturer, to justify a Category I application request. If the request does not meet the criteria specified in Sections (a-d) below, the Executive Officer will redirect the application to the appropriate category, the manufacturer will need to supply additional information to meet the requirements of the new category.



(a) Part Number(s) or Name Change(s)

If a manufacturer has a previously issued exemption Executive Order, and seeks only to add part numbers or name change(s) to the Executive Order, the application will be evaluated for the design (excluding exterior appearances such as color), fit, and function of the additions to those which are currently exempted. A new Executive Order will be issued on the basis of similarity without the need for additional testing.

(b) Model-Year Additions on Carryover Vehicle(s) or Engine(s)

If a manufacturer has a previously issued exemption Executive Order and has requested to add model-years to the same vehicle or engine coverage, the Executive Officer shall evaluate applicable emission certification standards, worst case vehicle(s) or engine(s) tested, other information used in prior exemption Executive Order(s), and whether the emissions control system has changed and emissions would be negatively impacted for the requested additional model years. The Executive Officer shall grant the request upon determining that the findings leading to the initial exemption Executive Order approval are valid for the added model years. The device(s) must maintain the same design (excluding exterior appearances, such as color), fit, and function as described in prior exemption Executive Order(s). A new exemption Executive Order will be issued without the need of additional testing. New part numbers can be assigned to the model-year additions only.

(c) Private Label(s) or Extending Coverage to Subsidiaries

Manufacturers who have requested to extend all or part of their previously issued exemption Executive Order(s) to another manufacturer or to its own subsidiaries must request approval for such extensions from the Executive Officer. In reviewing the request, the Executive Officer shall evaluate design control and if the part(s) are identical in design (excluding exterior appearances, such as color), fit and function to those currently exempted. If all requirements are met, a new Executive Order will be issued to the marketing manufacturer or a new Executive Order will be issued to the manufacturer with the added marketing manufacturer listed in the Executive Order. Private label(s) and subsidiaries can use different marketing names and part numbers for this request. The manufacturer with design control maintains all responsibility for emissions compliance.

(d) Consolidation of Executive Orders

(1) A manufacturer can consolidate its previously issued exemption Executive Orders into a new issued exemption Executive Order when all of the following criteria are met:

(A) Device name is the same on all exemption Executive Orders to be consolidated

- (B) Applicable OEM is the same on all exemption Executive Orders, except when combined under the same test group or engine family, to be consolidated
  - (C) Device description is the same on all exemption Executive Orders to be consolidated
  - (D) All information provided associated with the exemption application as approved by the Executive Officer is still applicable to the devices to be consolidated.
- (2) A manufacturer, at the time of application submission, can request CARB to provide a consolidated exemption Executive Order when application submissions share the criteria listed in (A-C) above. The applications must be submitted at the same time when such a request is being made. Each application submission will be evaluated separately.

## **VII. ACTION ON APPLICATION**

### **(a) Basis of Evaluation**

The Executive Officer shall utilize the manufacturer's test data (if applicable), CARB's confirmatory test data (if applicable), information submitted with the application, and the engineering analysis conducted on the device's drivability and performance, and durability, to determine if the device increases emissions or reduces the effectiveness or durability of the emissions control system, including on-board diagnostics.

### **(b) Confirmatory Testing**

If confirmatory testing of submitted data is deemed necessary, the manufacturer will be notified within 10 days from the time the Executive Officer has received a completed test report by the independent laboratory chosen in response to the issued test memo. The vehicle or engine can be restored or released after the 10 day period if CARB has not provided notice of its intent to conduct confirmatory testing.

If test data is included with an initially submitted application, the manufacturer will be notified of a decision to conduct confirmatory testing within 20 days from the date the Executive Officer has received a completed application. The vehicle or engine can be restored or released after the 20 day period if CARB has not provided notice of its intent to conduct confirmatory testing.

Upon request for confirmatory testing, the independent laboratory must provide the test vehicle(s) or engine(s) to CARB's test laboratory. Confirmatory tests will be

completed within 30 days of receipt of test vehicle(s) or engine(s). Vehicle, engine, or device issues observed by CARB staff during the confirmatory testing process can cause a rejection of test vehicle(s) or engine(s) or a delay in completing confirmatory testing as CARB staff work with the device manufacturer on a resolution.

The results of CARB confirmatory tests shall be reported to the manufacturer within 15 days of completion of the tests and the associated quality reviews. The manufacturer and authorized representative shall be given the opportunity to observe all confirmatory tests. Confirmatory testing conducted by CARB will use any or all emissions test cycles that the vehicle or engine was originally certified to in order to demonstrate emissions compliance with the device installed.

If CARB confirmatory test results demonstrate that the device does not comply with the criteria stated in these procedures, the exemption application will be rejected and closed out.

## **VIII. LABELING REQUIREMENTS**

The device manufacturer shall provide with each device sold and covered by the Executive Order a product information label, minimum of 12 point font, and complete instructions for its installation of the label in an under hood location for vehicles or engines, or near the tune-up label on motorcycles, that is readily visible to the average person. The product information label shall contain ~~only~~ the following: One unique product name as listed on the exemption Executive Order, CARB Executive Order number using the format "CARB D-XXX," and manufacturer's name and contact information. Manufacturers can add only one of the following to the label: reference numbers, device numbers, or kit part numbers; a single category may include multiple numbers. The label installation instructions shall contain a warning to the consumer in bold lettering that the product information label is required to aid inspection of the vehicle under the California Smog Check program. The product information label shall be designed to be durable in material, wording, and method of adhesion for the useful life of the vehicle or engine; the manufacturer must provide documentation or an engineering analysis to support compliance with this requirement.

When the installation of the device requires re-routing of any vacuum or fuel hose(s), belt(s) or changes to the vehicle or engine manufacturer's tune-up specifications, the product information label or a second label shall also provide a complete description of the required changes. A consumer information label must be provided when changes are to be made to the vehicle or engine manufacturer's recommended or required fuel specifications. Instructions must be provided on placement near the fuel fill cap. These labels must also be designed to be durable in material, wording, and method of adhesion for the useful life of the vehicle or engine.

## **IX. ISSUING AN EXEMPTION EXECUTIVE ORDER**

If the Executive Officer determines that a device will not reduce the effectiveness of the emissions control system, will not result in emissions that exceed the applicable model-year emission standards or comparative baseline levels for each vehicle or engine specified in the vehicle or engine list, and that it meets all the requirements set forth in Sections IV through VI of these procedures, the Executive Officer shall issue an Executive Order exempting the device(s) from the prohibitions of Vehicle Code Section 27156. The Executive Officer's determination will be based on the manufacturer's test data (if applicable), CARB's confirmatory test data (if applicable), information submitted with the application, and the engineering analysis conducted on the device's drivability and performance, and durability. Further as a condition for the exemption, the modified vehicle must be capable of completing and passing the Smog Check test that applies. The manufacturer shall not: 1. use the Executive Order as an endorsement or approval by CARB, 2. market the device(s) using any identification other than that shown on the Executive Order, 3. Apply the Executive Order to parts sold prior to the date shown on the Executive Order, 4. market the device(s) for an application other than those listed on the Executive Order, 5. offer for sale, or advertise any component of an applicable kit as an individual device, or 6. advertise the product as capable of reducing emissions.

The Executive Officer shall deny the applicant's exemption request if the device will reduce the effectiveness of the emissions control system, will result in emissions that exceed the applicable model-year emission standards or comparative baseline levels for each vehicle or engine specified in the vehicle or engine list, or that it does not meet all the requirements set forth in Sections IV through VI of these procedures. If the applicant's exemption request is denied, the Executive Officer shall convey by letter notice of and the reasons for denial.

When needed for CARB and California Smog Check Programs, the Executive Officer will request manufacturers to submit the information collected according to Section III (b)(8) of these procedures. Manufacturers shall submit the collected information within 45 days of the request. Failure to submit the information in the required timeframe will result in a hold on current and new applications from the manufacturer for similar devices.

Manufacturers that must demonstrate OBD system performance, as stated in Section V (c) of these procedures, will have a hold placed on current and new applications, if data is not presented to the Executive Officer at the conclusion of a data collection time period agreed on between the manufacturer and the Executive Officer.

Violation of any of the conditions contained in these procedures shall be grounds for revocation of the granted Executive Order. The Executive Order can be revoked only after a 10 day written notice of intention to revoke the order, during which period the holder of the order must request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within 10 days of receipt of the request and the order will not be revoked until a determination is

made after the hearing that grounds for revocation exist.

CARB reserves the right in the future to review the exemption Executive Order to assure that the exempted device(s) continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

## **X. AUDIT TESTING**

CARB reserves the right to perform audit testing. The Executive Officer shall have the option to select and procure off-the-shelf exempted devices, up to five new aftermarket parts or kits per manufacturer each year, for audit testing on vehicles or engines that CARB has tested to establish baseline data. Audit testing conducted by CARB shall utilize, at a minimum, the same testing protocols and procedures required of the manufacturer during the exemption process. CARB will use any or all emissions test cycles that the vehicle or engine was originally certified to in order to demonstrate emissions compliance with the device installed and can utilize additional screening tests which are based on CARB's work for assessing performance of modern light-, medium-, and heavy-duty vehicles, heavy-duty engines, and motorcycles. The tests will represent real world driving operations to detect defeat devices, and can include OBD interrogation and over-the-road testing using portable engine measurement system. The Executive Officer shall revoke a previously granted exemption if the test vehicle or engine fails to demonstrate emissions compliance with the device installed, the testing reveals evidence of the presence of a defeat device, or the test results otherwise fail to meet the Evaluation Criteria as outlined in these Procedures.