

New Procedures Overview

Procedures for Exemption of Add-on and Modified Part(s) for On-road Vehicles/Engines

October 7, 2021

Outline

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New Procedures Background

- Main objectives:
 - To clarify, streamline, and update the current process
 - More relevance to today's vehicles and engines
- Application forms for each Category:
 - Updatable application forms will clarify the type of information needed
 - Application process will be more focused on device type
- The expectation:
 - Faster turnaround on staff review and approval
 - Manufacturers are able to bring products to market faster
 - May increase the total number of applications per manufacturer
 - On average, the number of total tests should remain the same

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.

- Applicable to on-road vehicles and engines

These procedures do not apply to:

- Aftermarket Catalytic Converters
- Critical Emissions Components for On-Highway Motorcycles
- Liquefied Petroleum Gas or Natural Gas Retrofit Systems
- Alcohol or Alcohol/Gasoline Fuels Retrofit Systems
- Aftermarket Parts for Off-Road Vehicles, Engines, Equipment
- Verification Procedure, Warranty and In-Use Compliance Requirements

III. Application Submission Requirements

(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.

- **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
- **Category II** – Air Intake Kits or Modifications
- **Category III** – Engine Control Module (ECM) Programmers or ECM Signal Modifications
- **Category IV** – Fuel Tanks or Fuel Tank Modifications
- **Category V** – Intercooler Kits, Intercooler Components or Modifications
- **Category VI** – Supercharger and Turbocharger Kits or Modifications
- **Category VII** – Pre-Catalyst Exhaust Components
- **Category VIII** – Other Categorized Parts
- **Category IX** – Add-On or Modified Part(s) Not Covered by Categories II through VIII

III. Application Submission Requirements (Cont.)

(b) Application Requirements: the application must contain:

1. Applicant contact Information
2. List of vehicles or engines included in the application
3. List of part numbers
4. Installation instructions
5. Detailed description of the device
6. Facsimile (or actual copy) of the label (see Section VIII for labeling requirements)
7. 7. Sample kit or part (if requested)
8. Plan to collect VINs (if applicable)
9. Signed attestation by the manufacturer

III. Application Submission Requirements (Cont.)

(c) Application and Letter of Intent Submissions

- **Applications**
 - Applications can be sent by email to AMPES@arb.ca.gov or hardcopy (Section III (c) for details) until we transition to the M-Files online system
- **Letter of Intent (Section III (c) for details)**
 - Existing Manufacturers - Recommended to submit by January 30th of each year
 - New Manufacturers – Encouraged to submit with first application

III. Application Submission Requirements (Cont.)

(d) Vehicle or Engine Coverage Requirements

- (A) Single OEM
- (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

**Except when variations exist within the same test group or engine family*

If applicable, a list of vehicle or engine models the manufacturer voluntarily excludes.

IV. Evaluation and Testing Criteria

(a) Drivability and Performance

(b) Durability

(c) On-Board Diagnostic Requirements

(d) Testing and Evaluation Requirements For Vehicles with GVWR \leq 14,000 lbs

- Categories II and V: No OEM sensors (excluding IAT sensor): USO6 and OBD
With OEM sensors : FTP, USO6, OBD
- Categories III: FTP, USO6, OBD
- Categories IV: Evap, Refueling, OBD
- Categories VI: FTP, USO6, SC03, OBD

(e) Testing and Evaluation Requirements for Motorcycles

(f) Testing and Evaluation Requirements for Engines

V. Test Vehicle or Engine Selection and Testing

(a) Vehicle or Engine Selection

- Worst case
- Certified HD engine on chassis

(b) Emissions Testing Options

- Emission Standards
- Comparative Emissions Testing (Baseline vs Modified)
- Additional or Alternate Testing

Note: For when US06 only is required, use OEM FTP/SC03 to calculate composite

(c) On-Board Diagnostic Testing

(d) Vehicle or Engine Break-In Requirements

(e) Test Laboratory

VI. Criteria for Category I Application Requests

- If the request does not meet the criteria specified in Sections (a-d) below, the applicant will be redirected to the appropriate category (the manufacturer will need to supply additional information to meet the requirements of the new category)

ONLY ONE OF THE FOLLOWING MAY BE SELECTED FOR EACH APPLICATION:

- (a) Part Number(s) or Name Change(s)
- (b) Model-Year Additions on Carryover Vehicle(s) or Engine(s)
- (c) Private Label(s) or Extending Coverage to Subsidiaries
- (d) Consolidation of Executive Orders

**Each subcategory will be covered in the next four slides*

VI. Criteria for Category I Application Requests

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

- Manufacturer has a previously issued EO, and seeks only to add part numbers or name change(s)
- 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 EO will be issued on the basis of similarity without the need for additional testing.

VI. Criteria for Category I Application Requests

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

- Manufacturer has a previously issued EO, requests to add model-years (MY's) to the same vehicle/engine coverage.
- Evaluate certification standards, previous vehicle/engine(s) tested, other information used in prior EO(s), and if emissions control system has changed and emissions would be negatively impacted for the requested additional MY's.
- Findings leading to the initial EO 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 EO(s).
- A new EO will be issued without the need of additional testing. New part numbers can be assigned to the model-year additions only.

VI. Criteria for Category I Application Requests

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

- Manufacturer's who have requested to extend all or part of their previously issued EO, to another manufacturer or to its own subsidiaries.
- 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 EO will be issued to the marketing manufacturer or a new EO will be issued to the device manufacturer with the added marketing manufacturer listed.
- 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.

VI. Criteria for Category I Application Requests

(d) Consolidation of Executive Orders

- (1) A manufacturer can consolidate its previously issued EO's into a new issued EO when all of the following criteria are met:
 - (A) Device name is the same on all EO's
 - (B) OEM is the same on all EO's (except when combined under the same test group/engine family)
 - (C) Device description is the same on all EO's
 - (D) All info provided with the original application is still applicable to the devices

VI. Consolidation of Executive Orders

Additional Consolidation of Executive Orders Option

(d)(2) A manufacturer, at the time of application submission, can request CARB to provide a consolidated EO when application submissions share the criteria listed in (A-C) above. The applications must be submitted at the same time. Each application submission will be evaluated separately.

- (A) Device name is the same on all EO's
- (B) OEM is the same on all EO's (except when combined under the same test group/engine family)
- (C) Device description is the same on all EO's

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.

VII. Action on Application (Cont.)

(b) Confirmatory Testing

- If Confirmatory Testing is deemed necessary, the manufacturer will be notified:
 - Within 10 days of complete test report submission, or
 - Within 20 days of complete application submission (if test report is included).
- The vehicle or engine can be restored or released after the 10 or 20 day period (whichever applicable) if CARB has not provided notice of confirmatory testing.
- The vehicle must be delivered to the CARB laboratory
- Confirmatory testing should be completed within 30 days of receiving the vehicle/engine

VIII. Labeling Requirements

- Facsimile (or actual copy) must be submitted with the application
- One unique product name as listed on the exemption Executive Order
- 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 part numbers

IX. Issuing an Exemption Executive Order

The Executive Officer's determination will be based on:

- Manufacturer's test data (if applicable)
- CARB's confirmatory test data (if applicable; takes precedence)
- Information submitted with the application
- Engineering analysis conducted on the device's drivability, performance, and durability.

IX. Issuing an Exemption Executive Order (Cont.)

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
6. Advertise the product as capable of reducing emissions

X. Audit Testing

CARB reserves the right to perform audit testing:

- Select and procure off-the-shelf exempted devices
- Select up to five new aftermarket parts or kits per manufacturer each year
- Utilize at a minimum, the same testing protocols and procedures initially required of the device or part manufacturer
- Use any or all emissions test cycles originally used to show compliance and any additional screening tests based on CARB's assessment work
- Revoke EO if vehicle or engine with the device installed fails to demonstrate emissions compliance, testing reveals evidence of a defeat device, or fails to meet the Evaluation Criteria as outlined in the procedures

New Application Forms Overview

- Each category will have its own form for manufacturers to fill out.
- Category I has four unique forms.

We will now go through examples of draft application forms.

If you have any questions, please contact:

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