

DRAFT

## Major Steps of Certification and Compliance

for

2006 and Later Model Years All-terrain Vehicles and Off-highway Motorcycles

July 21, 2004

**This step-by-step guidance is intended to assist you in the certification process and does not replace any regulations.** Failure to comply with the applicable regulations can result in substantial penalties and EPA may revoke or suspend your certificates. It is your responsibility to know and comply with the regulations. This guidance document summarizes the major steps for EPA's certification and compliance programs for all-terrain vehicles (ATV) and off-highway motorcycles (OFMC), provides policy guidance where necessary and directs you to specific requirements regarding these major steps.

*For vehicles intended for sale in California, manufacturers must obtain separate certification from CARB. For these vehicles, the term "EPA/CARB" as used throughout this guidance document shall mean that any applicable certification requirements and agency action must be separately (and concurrently) addressed to and ruled on by EPA and CARB.*

*This document contains harmonized guidance for EPA and California Air Resources Board (CARB) certification. The EPA regulations that are cited throughout this document also have corresponding California regulations, unless otherwise noted.*

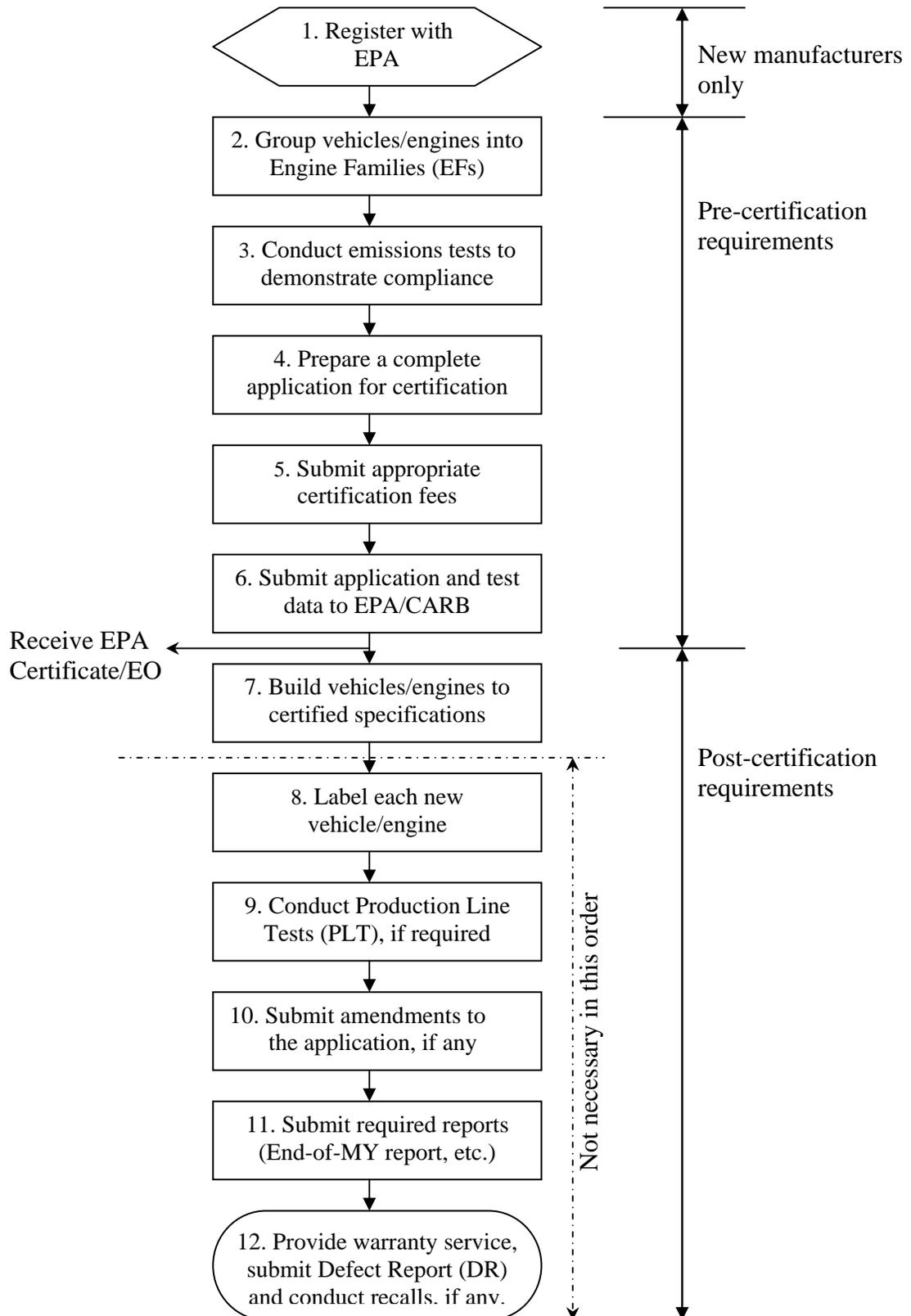
Please note, the citations specified in this draft document reflect the regulations as published on November 8, 2002 and are subject to change through future regulatory amendments.

Certification and Compliance Division  
Office of Transportation and Air Quality  
U.S. EPA

California Air Resources Board

## Major Steps of Certification and Compliance

for 2006 and Later Model Year ATVs and Off-Highway Motorcycles



## Step 1. Register with EPA:

A manufacturer\* who is applying for the first time for U.S. EPA emissions certification should start by registering with EPA. The registration process includes:

- 1) Send a **Manufacturer Registration Letter** to:

[Motorcycle/ATV Certification Team](#)  
Certification and Compliance Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, Michigan 48105  
(Email: MC-cert@epa.gov)

*For CARB certification, send a letter to:*  
[Mr. Allen Lyons, Chief](#)  
[Mobile Source Operations Division](#)  
[Air Resources Board](#)  
[9480 Telstar Ave. Suite 4](#)  
[El Monte, CA 91734-2301](#)

In this letter, provide general information about your company, your certification plans and a brief description of the new vehicles or engines that you intend to introduce into commerce in the United States. The letter must also contain answers to the List of Questions designed for a new manufacturer (see Attachment 1). If the information you provide is satisfactory, the Agency will inform you of your manufacturer status (e.g. small-volume manufacturer, independent commercial importer, agent of original equipment manufacturer. etc.). Once you obtain your status, proceed to 2) below.

- 2) Access the EPA's web site: [www.epa.gov/otaq/cfeis.htm](http://www.epa.gov/otaq/cfeis.htm). Under "New Manufacturer Registration" section, download the electronic [Manufacturer Code Entry Form](#), complete it and email it to us at [omscfeis@epa.gov](mailto:omscfeis@epa.gov). EPA will send an email or a fax back to you with your company's unique identification code. **You only need to register once.** After registration, if any change occurs, such as company name or mail address, you should submit updated information to [omscfeis@epa.gov](mailto:omscfeis@epa.gov) to allow EPA to keep accurate records about your company.

\* **Manufacturer**, in general "includes any person who manufactures a vehicle or engine for sale in the United States or otherwise introduces a new vehicle or engine into commerce in the United States. This includes importers that import vehicles or engines for resale" (Ref: 40 CFR §1051.801)

## Step 2. Group Vehicles/Engines into Engine Families (EF)

An Engine Family (EF) is the basic unit used by EPA to issue a certificate for recreational vehicles or engines. By definition, an EF means a group of vehicles/engines with similar emission characteristics (40 CFR §1051.801). Emission certification must be obtained every model year, regardless of whether your engine families change or not. **You are required to**

**submit a new application and pay certification fees for each EF that you intend to certify every model year.**

### **How to group vehicles or engines into Engine Families (EF)**

In general, you should divide your product line into families of vehicles/engines that are expected to have similar exhaust and evaporative emission characteristics throughout their useful life. You may group vehicles/engines into the same engine family if they are the **same in all** of the following aspects ([40 CFR §1051.230](#)):

- (1) The combustion cycle.
- (2) The cooling system (water-cooled vs. air-cooled).
- (3) Configuration of the fuel system (for example, port fuel injection vs. carbureted).
- (4) Method of air aspiration.
- (5) The number, location, volume, and composition of catalytic converters.
- (6) Type of fuel.
- (7) The number, arrangement, and approximate bore diameter of cylinders.
- (8) Evaporative emission controls

Note: Crankcase evaporative emissions may not be discharged directly into the ambient atmosphere from any vehicle. (Ref: [40 CFR §1051.115\(a\)](#))

### **How to name an Engine Family?**

To facilitate the certification process, EPA requests that all manufacturers use the following standardized naming convention for their engine families. This consists of twelve (12) characters which identify an individual EF. The following table explains in detail the naming convention for engine families of OFMCs and ATVs:

<b>Number of Characters</b>	<b>Column</b>	<b>Description</b>
1	1	<b>Model Year</b> (e.g. use “6” if you intend to obtain a 2006 MY certificate)
3	2-4	<b>Three letter manufacturer identification code</b> assigned by EPA at the time you register your company with EPA
1	5	<b>Vehicle Type</b> (use the letter “X” to represent OFMC and ATVs, including utility vehicles that are covered by applicable ATV regulations).
4	6-9	<b>Displacement</b> in cubic inches (e.g., 0350, 0097) or liters (e.g., 05.7-the decimal point counts as a digit and the leading zero is a space). For dual or variable displacement families, enter the maximum displacement. For large displacement engines, the displacement may be entered as XX .X format (e.g., 12.1). Small engines may be entered as a .XXX format (e.g., .072, 0.07, 00.7). In all cases the

		displacement will be read in liters if a decimal point is entered and it will be read in cubic inches if there is no decimal point.
3	10-12	<b>Sequence characters specified by a manufacturer.</b> Enter any combination of valid characters to provide a unique identification for the engine family name. It is recommended that numbers and letters be selected that minimize possible confusion.*
Example		<b>(1) 5XYCX0125AE7:</b> Where: "5"- for 2005 MY engine family, "XYC"-manufacturer, "X"-ATV or OFMC, "0125"- displacement 125 cubic inches, "AE7"- manufacturer specified code.  <b>(2) 6XYCX.072A6B:</b> Where: "6"-2006 MY engine family, "XYC"-manufacturer, "X"-ATV or OFMC, ".072"-.072 liter (the displacement is in liters since a decimal point is entered), "A6B"- manufacturer specified code.

\* At a minimum, the sequence characters, in combination with the other characters in the family name, must provide a unique identifier for the family. It is recommended, but not required, that the sequence characters themselves be unique for all families for a manufacturer and model year. These sequence characters may be used to codify information to meet California's requirements, but they will be treated as simple sequence characters by EPA's computer software.

#### Reference:

- (1) [VPCD-96-12](#) - EPA Standardized Motorcycle Engine Family and Evaporative Family Names for the 1998 and later Model Years
- (2) [CCD-04-01](#) - Update to EPA Standardized Test Group/Engine Family Name.
- (3) 40 CFR §[1051.230](#) How do I select engine families?

### Step 3: Conduct Emissions Tests to Demonstrate Compliance

The emission standards and test procedures required for 2006 and later model year ATVs and OFMCs are summarized in two tables in Attachment 2:

Table 1: [ATV Emission Standards and Test Requirement for 2006 and Later MY](#)

Table 2: [Off-Highway Motorcycle Emission Standards and Test Requirement for 2006 and Later MY](#)

Two types of emission tests are required to demonstrate that vehicles/engines your company manufacturers comply with exhaust standards as specified in [§1051.105](#), [§1051.107](#), or [§1051.145](#) and evaporative emission standards as specified in [§1051.110](#):

- Exhaust emissions tests: to measure CO, NO<sub>x</sub>, HC and CO<sub>2</sub> from the exhaust.
- Evaporative emissions tests: to measure HC permeation emissions from fuel tanks and fuel lines.

*For CARB off-highway recreational vehicle emission standards, refer to Title 13, California Code of Regulations (13CCR), Section 2412(b). For ATVs tested under the small off-road*

*engine procedures, refer to 13CCR, Section 2403(b). These can be accessed at <http://ccr.oal.ca.gov>.*

### **Test for Exhaust Emissions**

In general, the core steps to test **exhaust** emissions include the following:

- 1) Select an Emission-Data Vehicle/Engine (EDV) from each EF (Ref: 40 CFR [§1051.235\(b\)](#))
- 2) Conduct service accumulation
- 3) Conduct durability tests to generate Deterioration Factors (DF) for each regulated pollutant (Ref: [§1051.520](#))
- 4) Conduct emissions tests (Ref: [§1051.235 \(a\)](#))
- 5) Calculate end-of-useful life emissions (Ref: [§1051.240\(c\)\(1\) or \(2\)](#))
- 6) Demonstrate compliance with the required emission standards by comparing end-of-useful life emissions with the applicable emission standards

For exhaust emission tests performed for vehicles on a **chassis** dynamometer, use the appropriate equipment, procedures, and duty cycles as specified in 40 CFR Part 86, Subpart F. For tests performed on ATV engines for emission standards set forth in §1051.145, follow the procedures in [§1051.145\(b\)\(2\) and \(b\)\(3\)](#).

For ATVs with a displacement less than 100 cc or off-highway motorcycles with displacement equal to or less than 70cc, use the testing procedures described in [§1051.615\(d\)](#) to meet the emissions standards set forth in [§1051.615\(a\) or \(b\)](#). *CA has no special alternate provisions.*

In certain cases, you may use previously generated emission data instead of conducting new tests for a new certificate. See [§1051.235\(c\)](#) for details.

If you are a qualified small-volume manufacturer (SVM), you may use EPA-assigned DFs for your emission calculations, or you may request “certify-by-design”, instead of testing your vehicle to generate the required emissions data. To “certify-by-design”, you must show, in writing to the EPA, that the technology used on your vehicles/engines is sufficiently similar to the previously tested technology and that your vehicles/engines will comply with the applicable emission standards. *[CARB regulations have no allowance for small volume manufacturers and do not offer assigned DFs.]*

### **Reference**

- 40 CFR §1051.235 What emission testing must I perform for my application for a certificate of conformity?
- 40 CFR §1051.501 What procedures must I use to test my vehicles or engines?
- 40 CFR § 1051.240 How do I demonstrate that my engine family complies with exhaust emission standards?
- 40 CFR §1051.615 What are the special provisions for certifying small recreational engines?
- 40 CFR §1051.145 What provisions apply only for a limited time?
- 40 CFR §1051.250 What records must I keep and make available to EPA?
- 40 CFR §1051.635 What provisions apply to new manufacturers that are small businesses?
- [13CCR, Section 2412\(b\) Off-highway recreational vehicle exhaust emission standards](#)
- [13CCR, Section 2403\(b\) Small off-road engine exhaust emission standards](#)

### **Test for Evaporative (Permeation) Emissions**

The evaporative hydrocarbon emissions standards are found in 40 CFR §[1051.110](#). The direct standards are 1.5 grams per square meter per day (1.5 g/m<sup>2</sup>/day) for a fuel tank and 15 grams per square meter per day (15 g/m<sup>2</sup>/day) for all of fuel lines.

There are two methods you may use to demonstrate compliance (Ref: §[1051.245](#)):

- 1) Emission testing method as specified in §[1051.515](#) and Figure §[1051.515-1](#) that presents a flow chart for the permeation testing and shows the full test procedure with durability testing, as well as the simplified test procedure with an applied deterioration factor.
- 2) “Certify-by-design” method by showing fuel tanks and fuel lines comply with the design specifications listed in §[1051.245\(e\)](#).

Small volume manufacturers may use an EPA-assigned DF instead of conducting emission tests to develop a DF (Ref: §[1051.245\(c\)\(1\)](#)).

*This requirement will not be reviewed by CARB.*

#### **Reference:**

40 CFR §1051.501 What procedures must I use to test my vehicles or engines

40 CFR §1051.515 How do I test my fuel tank for permeation emissions?

40 CFR §1051.245 How do I demonstrate that my engine family complies with evaporative emission standards?

### **EPA/CARB Audits**

EPA/CARB may conduct certification confirmatory tests, production line tests or in-use tests to measure emissions from any of your vehicles or engines within the engine family or require you to test a second vehicle or engine of the same engine family or different configuration within an engine family (Ref: 40 CFR §1051.235 (d) and [40 CFR Part 1068 Subpart E](#)).

#### **Reference:**

40 CFR §1051.235(d): What emission testing must I perform for my application for a certificate of conformity?

40 CFR Part 1068 Subpart E: Selective enforcement audit

## **Step 4: Prepare an Accurate and Complete Application Package for Certification**

An application for Certification is required to be submitted for each Engine Family for a new model year. This is the documentation that describes what vehicles and engines are covered by the certificate, and how they comply with the emission standards and other regulatory requirements.

### **Application Format**

Instructions on the format of the Application for Certification are contained in a separate guidance - ATV/OFMC Guidance 2 of 3: **RECOMMENDED APPLICATION FORMAT FOR CERTIFICATION OF OFF-HIGHWAY MOTORCYCLES AND ALL-TERRAIN VEHICLES**. Guidance 2 provides detailed instructions regarding how to prepare an accurate and complete Application for Certification.

Your application package is the primary information source of the engine family you intend to certify and it provides the basis for EPA's/[CARB's](#) determination of compliance with the applicable emission control regulations. **A complete and accurate application for certification must be submitted for each engine family prior to EPA/[CARB](#) issuance of a Certificate of Conformity or [Executive Order](#).**

**Advance EPA/[CARB](#) Approval**

Please note that manufacturers must obtain advance EPA/[CARB](#) approval before taking any action or submitting an application on certain items as listed below, unless otherwise instructed:

- any proposed modifications to EPA/[CARB](#)-specified durability and emission test procedures
- any proposed change to EPA/[CARB](#)-standardized vehicle emission control information (VECI) label specifications (Ref: [§1051.135](#))
- request to become an EPA-designated small volume manufacturer (Ref: [§1051.635](#) and [§1051.801](#)). *[Please note, there are no small volume manufacturer provisions for [CARB](#).]*
- request for competition vehicle exemption (Ref: [§1051.620](#))

**Application Amendments**

If, prior to EPA/[CARB](#) certification, a manufacturer needs to amend an application that has already been submitted to EPA/[CARB](#) due to changes that have occurred, these changes must be submitted electronically to your designated EPA contact *[and [mailed to your designated CARB contact](#).]*

**Application Package:**

**a. EPA Package Content**

Manufacturers are required to send an electronic application package to EPA for certification review. The package must at a minimum include:

EPA Application Package Content	Format
<b>1) Application:</b> <ul style="list-style-type: none"> <li>• A cover letter signed by an authorized representative of your company</li> <li>• Complete content of application for certification</li> <li>• A Fee Payment Form</li> <li>• California E.O., if sales area is “California only”</li> </ul>	PDF
<b>2) Data Summary Sheet *</b>	

**\* EPA and CARB are targeting on making the new database and computer system ready for the 2006 MY ATV/OFMC certification program. Before the system is functional, manufacturers are required to use an interim Data Summary Sheet (a data input file in MS Excel format) to submit electronic data for the current EPA database.**

**b. CARB Package Content (for 2006 and later model years)**

*For CARB certification review, manufacturers are required to mail either a CD (with cover letter) or a hardcopy application.*

<i>CARB Package Content</i>	<i>Format</i>
<p><i>1) Application:</i></p> <ul style="list-style-type: none"> <li><i>• A cover letter with signature</i></li> <li><i>• Complete content of application for certification</i></li> <li><i>• EPA certificate for 50 St families certified in CA</i></li> </ul> <p><i>* can be submitted upon issuance</i></p>	<p><i>PDF</i></p>

**Recommendations to New Manufacturers**

To expedite EPA/CARB review, we strongly recommend that a manufacturer who is new to the U.S. EPA/CARB certification and compliance procedures discuss certain topics with your assigned EPA/CARB certification representative well in advance of requesting certification. These topics may include, but are not limited to:

- VECI label content, format and print size, location, and visibility. You may use a photo copy of the label to show this.
- averaging, trading and banking plans, if any
- warranty statements
- emission-related maintenance instructions you intend to provide to the owners of your vehicles/engines

Reference:

- §1051.201 What are the general requirements for submitting a certification application?
- §1051.205 What must I include in my application?
- §1051.215 What happens after I complete my application?
- §1051.250 What records must I keep and make available to EPA?
- §1051.255 What decisions may EPA make regarding my certificate of conformity?

**Special Instructions for Data from a New Testing Facility**

In general, if your certification test data is provided by an emission testing facility that is new to EPA’s automotive certification program, you should provide satisfactory documentation to the EPA that shows:

- 1) the testing facility has demonstrated knowledge of the U.S. EPA certification testing regulations, has the required testing equipment and is fully compliant with the required

- testing procedures contained in the Code of Federal Regulations, 40 CFR Part 86, Subpart F and E or 40 CFR Part 1051 and Part 1065; and
- 2) the testing facility has established an initial satisfactory correlation with the Agency's testing facility or any other reputable independent U.S. certification testing facilities; and/or
  - 3) the testing facility has demonstrated continued correlation by participating periodical correlation confirmation tests among the U.S. testing facilities; and
  - 4) the name, address, telephone number of the manager of the testing facility, and working hour when the manager can be contacted; and
  - 5) a detailed description of the test fuel properties used for testing, demonstrating compliance with the requirements of 40 CFR 86.513-94 or 40 CFR 1065, subpart C, as applicable; and
  - 6) a detailed description of the dynamometer and exhaust gas sampling, demonstrating compliance with the requirements of 40 CFR 86.508-78 through 511-90 or 40 CFR 1065.110, as applicable; and
  - 7) a detailed description of calibration gases used to calibrate the exhaust gas analyzer, demonstrating compliance with the requirements of 40 CFR 86.514-78 or the applicable requirements in 40 CFR 1065 Subpart D; and
  - 8) a description of the dynamometer driving schedule used for certification testing which demonstrates compliance with the requirements of 40 CFR 86.515-78, or the applicable requirements contained in 40 CFR 1051 and 1065; and
  - 9) a description of the method and frequency of calibrating the equipment used for certification testing which demonstrates compliance with the requirements of 40 CFR 86.516 through 86.526, or the applicable requirements in 40 CFR 1065.

EPA may ask you to provide any additional information, including but not limited to, a description of the test procedure used for certification testing, raw test data logs, records of dynamometer driving traces, original logs for service accumulation, photos of testing equipment, raw test results and calculations, correlation test information and analysis, how/when/where and by whom the vehicles/engines were tested, etc.

### Step 5: Pay Appropriate Certification Fees

EPA requires payment of a certification fee (40 CFR Subpart Y, 85.2408(c)) in advance of any EPA services related to certification activities. The application for certification should not be submitted until the certification fee is paid and a manufacturer has completed all required emission tests. EPA will accept and begin work on the application only after the fee is received. Proper and timely fee payments will minimize delays for both the manufacturer and EPA. A fee payment is required for each certificate issued by EPA.

The current EPA certification fee schedule is: (Effective Period: 7/12/04 – 12/31/05)

Category	Certificate Type	Fees Per Certificate
ATV & Off-highway Motorcycles	All Types	\$826
On-Highway Motorcycles, Including ICIs	All Types	\$2,414

The fee schedule will change for each model year as it is adjusted for inflation and to reflect changes in the numbers of certificate issued. Please visit [www.epa.gov/otaq/fees.htm](http://www.epa.gov/otaq/fees.htm) for the most current information and the exact fees you need to pay for a specific model year.

The fee is made payable to the U.S. Environmental Protection Agency according to the procedure described in EPA guidance letter [CCD-04-14](#) and must be submitted with a Fee Filing Form, which is available at: [www.epa.gov/otaq/fees.htm](http://www.epa.gov/otaq/fees.htm). Allow approximately two weeks for the EPA to receive the fee and log your payment into our database. Proof of payment is based on the payment being received by EPA and its entry into the EPA database.

*Current CARB regulations do not require off-road certification fees.*

## **Step 6: Submit the Application Package for Certification**

Before the EPA/CARB database is functional, there are three different submission procedures depending on where you intend to sell the vehicles/engines covered by the certificate: in California only; in all 50 states; or in the U.S. except California (“49 states”).

- 1) For a “**California only**” certificate: submit your application to CARB first and obtain their Executive Order (E.O.) prior to applying for a Federal certificate; EPA in general issues a Federal certificate only after a California E.O. is issued.
- 2) For a “**50 states**” certificate: submit your application to EPA *and CARB concurrently*.
- 3) For a “**49 states**” certificate: submit your application to EPA only.

### **Current Application Submission Process**

Manufacturers are required to either email or mail your **electronic** application package (using any electronic media, such as a CD) to the EPA. Please be aware that the confidentiality of email transmissions cannot currently be guaranteed, so if this is of particular concern to you, you may prefer to send applications via regular mail. Send the package to the attention of your designated EPA certification representative at:

Motorcycle/ATV Certification Team  
Certification and Compliance Division  
Office of Transportation and Air Quality  
U.S. EPA  
2000 Traverwood Drive  
Ann Arbor, MI 48105

*Manufacturers are required to mail either CD (with cover letter) or hard copy application to CARB:*

*Mr. Allen Lyons, Chief  
Mobile Source Operations Division  
Air Resources Board  
9480 Telstar Ave. Suite 4  
El Monte, CA 91734-2301*

### **Future Plans – For information only**

The EPA Certification and Compliance Division is currently redesigning its computer system. The new system architecture will allow EPA and CARB to share data and will permit manufacturers to submit their data and application package in one of three ways:

- 1) **Upload manufacturers’ data and files to the EPA system via Web browser:**

Manufacturers can create their data with whatever tool they wish, as long as the output is in XML format as specified by EPA (EPA will provide the XML schema) and then upload to EPA's system using a standard web browser.

2) **Provide data and files using interactive Web forms:**

Manufacturers can use the EPA developed web forms to interactively input their data field-by-field and to attach their PDF application to the input form using a standard web browser.

3) **Using computer-to-computer data transmittal:**

Manufacturers can send their XML formatted data computer-to-computer without the use of human intervention through the Internet.

The ATV/OFMC/HMC program is a pilot for this proposed new computer system. The [EPA/CARB](#) is planning to have the system ready and start collecting data for the program in a near future, and the instructions on "how to" will be provided.

### **Step 7. Build Vehicles According to Certified Specifications**

After receiving an EPA certificate and/or CARB Executive Order, (E.O.), manufacturers must take the necessary steps to assure that the production vehicles or engines are within the scope of an issued certificate/E.O., with respect to materials, engine design, drivetrain, fuel system, emission control system strategy and components, exhaust after-treatment devices, vehicle mass, or any other device and component that can reasonably be expected to influence exhaust emissions.

### **Step 8: Label Each New Vehicle Produced**

In general, three labels are required for each new vehicle you produced:

- a permanent and unique Vehicle Identification Number (VIN) (§[1051.135\(a\)](#));
- a permanent Vehicle Emission Control Information (VECI) label (§[1051.135\(b\) to \(e\)](#)); and
- a removable consumer information hang-tag which provides relative emission information in terms of normalized emission rate (NRE) in comparison with emissions of other vehicles (§[1051.135\(g\)](#)).

*[For CARB, the certifying manufacturer's name must be indicated on the VECI label]*

Reference:

40 CFR §1051.135 How must I label and identify the vehicles I produce?

40 CFR §1051.645 What special provisions apply to branded engines?

### **Step 9: Conduct Production Line Tests (PLT)**

Engine families, except those complying with the Phase I emissions standards **and** not certified to Family Emission Limits (FELs) (*40 CFR* §[1051.145\(c\)](#)), are subject to the PLT requirements (Ref: 40 CFR Part 1051, [Subpart D](#)).

Small volume manufacturers are exempted for the PLT requirements (*40 CFR* §[1051.301\(a\)](#)).

### **Advance EPA Approvals**

When PLT requirements are applicable, you must get EPA’s advance approval for the following items, unless otherwise instructed:

- use of an alternative PLT program (§[1051.301\(d\)](#))
- reduced PLT tests after two years of good records (§[1051.301\(e\)](#))
- methods to handle a malfunctioned PLT vehicle or engine (§[1051.305\(c\)](#))
- retest after an invalid test (§[1051.305\(g\)](#))

**PLT Procedures**

Manufacturers who are subject to PLT requirements must conduct PLT after receiving a certificate during the model year’s production period and use the procedures described in §1051.301-315.

**Failure Reports**

If any single tested vehicle or an engine family fails, the manufacturer is required to submit a **failure report** to EPA as indicated in the following chart:

PLT Failure Case	Certificate Status	Remedy Action	Report Timing
a. An individual vehicle/engine fails	Automatically suspended for the vehicle/engine	See § <a href="#">1051.320</a>	Report in the end-of-test period report
b. An engine family fails	Suspended in whole or in part for the EF, EPA case-by-case decision.	See § <a href="#">1051.325</a> & § <a href="#">1051.335</a>	Report within 10 days (§ <a href="#">1051.315(g)</a> )

EPA will review the report and notify the manufacturer of its decision that may include, but is not limited to, suspending or revoking the certificate, amending FELs, etc. To reinstate a suspended certificate, a manufacturer must make corrections to ensure their vehicles/engines meet emissions standards set forth in §1051.105, §1051.107 and §1051.145.

**Periodic Reports**

Manufacturers subject to PLT are required to submit the following periodic reports (Ref §[1051.310](#))

Project EF Sales	Production Period	Test Period	Required Report	Note
≥ 1600 units	= 12 Months	3 Months	1 report / 3 mo	Submit periodical <b>electronic</b> report within 30 days of the end of each test period.
	< 12 Months	Equal segment, 70 – 125 days/Segment	1 report/segment	
< 1600 units	Any	Whole MY	1 report / MY	

EPA has the authority to revoke a certificate if a manufacturer does not meet the reporting requirements (§1051.340(a)(1)). Manufacturers must also keep **all paper** records as specified in §1051.350 for **one full year after all required testing has been completed for that engine family** in a model year.

**Reference**

- 40 CFR §1051.301 When must I test my production-line vehicles or engines?
- 40 CFR §1051.305 How must I prepare and test my production-line vehicles or engines?

- 40 CFR §1051.310 How must I select vehicles or engines for production-line testing?
- 40 CFR §1051.315 How do I know when my engine family fails the production-line testing requirements?
- 40 CFR §1051.320 What happens if one of my production-line vehicles or engines fails to meet emission standards?
- 40 CFR §1051.325 What happens if an engine family fails the production-line requirements?
- 40 CFR §1051.330 May I sell vehicles from an engine family with a suspended certificate of conformity?
- 40 CFR §1051.335 How do I ask EPA to reinstate my suspended certificate?
- 40 CFR §1051.340 When may EPA revoke my certificate under this subpart and how may I sell these vehicles again?
- 40 CFR §1051.345 What production-line testing records must I send to EPA?
- 40 CFR §1051.350 What records must I keep?

### Step 10: Submit Amendments to the Application

You must report to EPA/**CARB** any changes to the application made after EPA/**CARB** has issued a certificate/**E.O.** for that engine family. Minor typographical corrections may be submitted directly to the designated EPA/**CARB** officer.

There are three circumstances under which you must amend your application prior to taking the action. These actions are:

- 1) add a new vehicle configuration to the certified engine family; or
- 2) modify a FEL for a certified engine family; *[for CARB, designated standard change is not allowed once vehicles are certified;] or*
- 3) change a vehicle already included in the engine family in a way that may affect emissions.

Under these circumstances you will need to submit a request to EPA/**CARB** to amend the application and include the information required in 40 CFR 1051.225(b). Upon submitting this information to EPA/**CARB** you may take the requested action, however, EPA/**CARB** still has the authority to request more information, or to deny the requested action. Depending upon the change, EPA/**CARB** may issue a revised certificate or Executive Order.

*For CARB, the amendments should be submitted by mail in the form of a CD with a cover letter, or a hardcopy.*

#### Reference

- 40 CFR §1051.220 How do I amend the maintenance instructions in my application?
- 40 CFR §1051.215 What happens after I complete my application?
- 40 CFR §1051.225 How do I amend my application for certification to include new or modified vehicles or to change an FEL?

### Step 11: Submit Required Reports

Manufacturers must submit the following reports to EPA, if applicable:

1. **End-of-model year phase-in report** for the applicable phase-in time period. In general, the report is required for the first two phase-in model years and can be in the format of a spreadsheet that shows a breakdown of individual engine families, compliance status, U.S.

sales, total company U.S. sales and percentage compliance status within that appropriate model year.

2. **End-of-model year Averaging, Banking and Trading (ABT) report.** (see recommend format in Guidance 2)
3. **Periodical and end-of-model year PLT report** (see Step 9)

Failure to submit the required reports within the required time period may result in suspension or revocation of a certificate.

*Manufacturers must submit quarterly production reports and an End-of-Model Year corporate average report to CARB.*

## **Step 12: Provide Maintenance Instructions to Purchasers of Vehicles, Provide Warranty Service Information, Submit Defect Reports and Conduct Vehicle Recalls, if Any.**

### **Maintenance Instructions:**

40 CFR §[1051.125](#) provides the detailed requirements for written maintenance instructions that a manufacturer must provide to an ultimate purchaser of the vehicle. The application must contain the same maintenance instructions you provide to your customers.

Please note you may not schedule critical emission-related maintenance within the minimal useful life period for the components specified in 40 CFR §[1051.125\(a\)\(3\)](#).

The EPA and [CARB](#) require you to submit the owner's manual that contains your warranty statement and maintenance instructions to the EPA/[CARB](#) when it is available. Instead of submitting hard copies, you may provide us with electronic copies via CDs or email or access via an Internet link to that information.

### **Warranty Requirements**

Requirements for warranty, including warranty period, components covered, scheduled maintenance, limited applicability and aftermarket components are found in 40 CFR [1051.120](#). You are required to describe in the owner's manual the emission-related warranty provisions that apply to your vehicles/ engines.

### **Defect Reports and Recalls**

A certifying manufacturer must track warranty claims, parts shipments and any other information that may indicate possible emission-related defects. You must include a description of your tracking approach in your application for certification. You must investigate possible emission-related defects and send Defect Reports (DR) when the number of defects reaches the applicable threshold in the following table is reached (Ref: 40 CFR §[1068.501](#)).

If EPA determines your vehicles or engines do not conform to the applicable regulations, you must submit a remedy plan within 60 days of EPA's notice and remedy those non-compliance vehicles or engines at your expense.

**Thresholds for Initiating Investigation and Filing DRs**

Rated Power	Component	Thresholds (ref: 40 CFR 1068.501(e)& (f))	
		Investigation	Filing DR
< 560 kW	After-treatment Devices including Catalytic converter	2% or 2,000 units, whichever is less.	0.125% or 125 units, whichever is less.
	Other emission related components	4% or 4,000 units, whichever is less.	0.250% or 250 units, whichever is less.
≥ 560 kW	All emission related components	1% or 5 units, whichever is greater.	0.5% or 2 units, whichever is greater.

**Reference**

**40 CFR §1068. 501 –540** ([www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_40/40cfr1068\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr1068_00.html))

[1068.501](#) How do I report engine defects?

[1068.505](#) How does the recall program work?

[1068.510](#) How do I prepare and apply my remedial plan?

[1068.515](#) How do I mark or label repaired engines?

[1068.520](#) How do I notify affected owners?

[1068.525](#) What records must I send to EPA?

[1068.530](#) What records must I keep?

[1068.535](#) How can I do a voluntary recall for emission-related problems?

[1068.540](#) What terms do I need to know for this subpart?

**Attachment 1:****List of Questions for New Manufacturers**

To determine your manufacturer status for EPA's/CARB's emission certification program, please answer the following questions:

- 1) What are the specific details of the vehicles/engines that you intend to certify, such as vehicle/engine type, fuel type (gasoline, diesel), exhaust and evaporative emissions control devices, etc.? Please provide brochures, pictures, copies of owner's manuals, repair manuals, warranties, emission labels, and any sales or promotional information available to the public or other readily available materials which would be useful in explaining your products.
- 2) How will your products be manufactured? Provide a brief description of the manufacturing process for these vehicles/engines, including how, when, where and by whom the vehicles/engines are initially manufactured or assembled; how, when, where and by whom the vehicles/engines will be modified (if applicable) following initial assembly. Also describe briefly how, when, where and by whom the vehicles/engines will be tested for emissions. Briefly describe the test facility to be used for certification testing, including the type of dynamometer used and the test procedures used for certification testing.
- 3) What are the anticipated combined U.S. sales of vehicles/engines you intend to certify during the model year in question? Please provide breakdown sales numbers for each vehicle or engine category (such as ATVs, off-highway motorcycles, etc.)
- 4) Is your company linked to any other automobile manufacturing or importing company? For example, does your company lease, operate, control, supervise, or own part of another company which manufactures, imports, or certifies recreational vehicles? Does some other company lease, operate, control, supervise, or own part of your company? If so, what is the name of the company, the percent ownership, and the company's projected, combined U.S. sales of all recreational vehicles for the model year?
- 5) If the original manufacturer of the vehicles that you intend to certify makes production changes during the model year after certification, how will this information be made available to EPA/CARB for updating the application for certification you must submit to obtain your certificate of conformity? Describe the method used by the original manufacturer to notify you of any running changes made to the vehicle.
- 6) What assurances do you have of the durability of your emission control systems? How do you plan to demonstrate to the U.S. EPA/CARB that the control system technology described in your application which you intend to certify will meet emission standards throughout the specified useful life period?
- 7) What assurances do you have to confirm that production vehicles/engines will be identical in all material respects to the motorcycles described in application for certification?

- 8) Have you derived, or will you derive, deterioration factors (DFs) from the mileage accumulation, and associated testing, of a durability-data, or do you request to use EPA-assigned deterioration factors for the model year you wish to certify?
- 9) Are you aware of your obligation as a manufacturer to warrant, and will you warrant, the emission control system for the useful life of the vehicles/engines in accordance with the warranty requirements set forth in Section 207(a) of the Clean Air Act (42 U.S.C. 7541(a))?
- 10) How do you plan to demonstrate to the U.S. EPA that in-use emission non-compliance problems, if any, will be corrected in a timely manner? Provide a detailed description regarding your plans to track the vehicles/engines sold in the U.S., to handle customer complains, to track warranty claims, and to submit required Defect Reports to the U.S. EPA.
- 11) Are you an authorized representative for this manufacturer? Please appropriate documentation such as your contractual agreement with the manufacturer that provides you with the authority to work with that manufacturer or a letter on manufacturer letterhead signed by a high-level official from that company.