

# Major Steps of Certification and Compliance

for  
2006 and Later Model Years Highway Motorcycles

March 9, 2005

**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 / CARB 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 / CARB's certification and compliance programs for highway motorcycles (HMC), 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.*

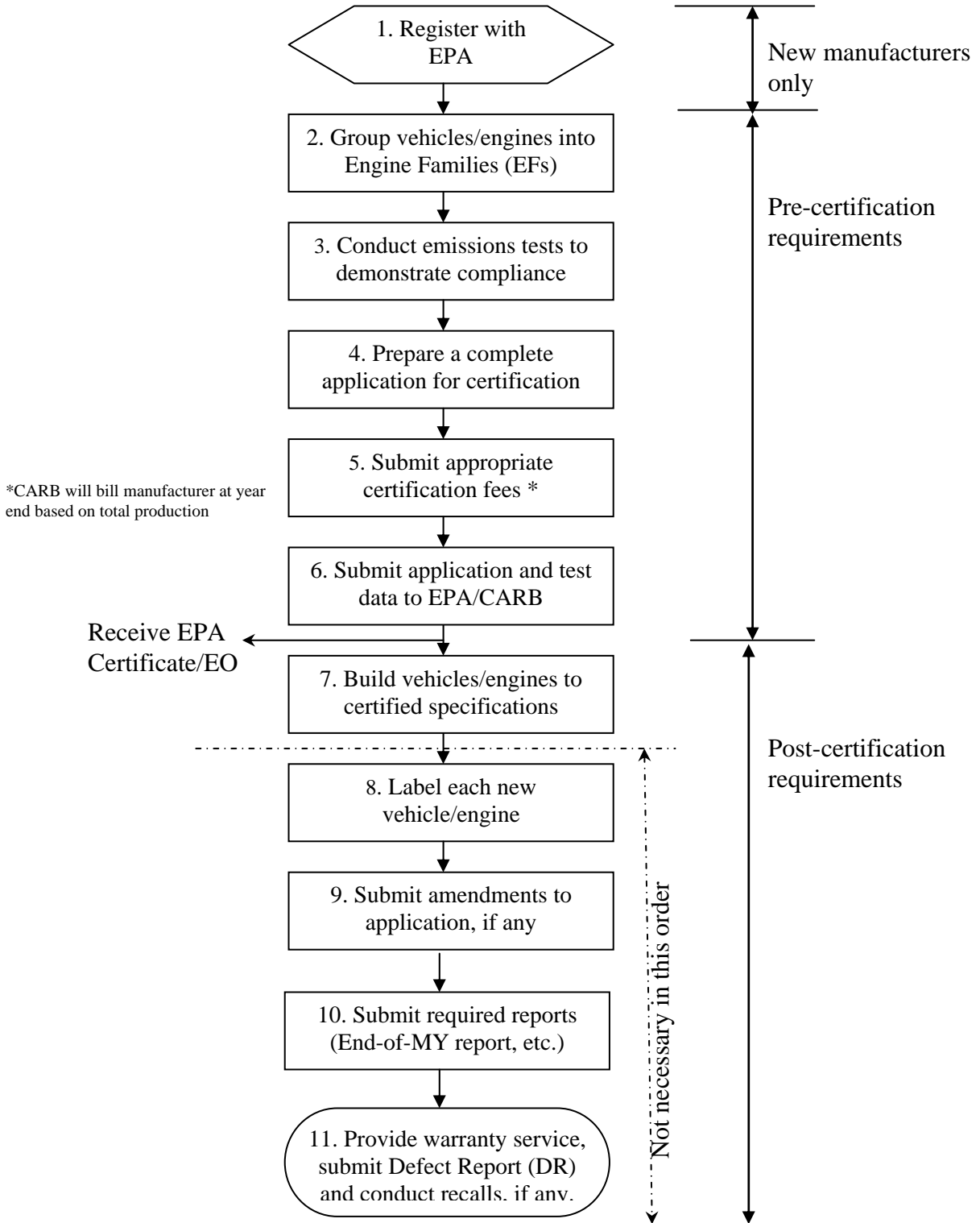
Please note, the citations specified in this draft document reflect the regulations as published on January 15, 2004 and are subject to change through future regulatory amendments.

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

California Air Resources Board

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for 2006 and Later Model Year 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 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 for resale" (Ref: section 216(1) of CAA). For California the certifying importer must demonstrate complete control of the vehicle specifications to ensure all production vehicles are represented by the certification application. Importers who cannot demonstrate full control of vehicle specifications will be considered as a direct importer and cannot be certified for sale in California.

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

An Engine Family (EF) is the basic unit used by EPA / CARB to issue a certificate for highway motorcycles. By definition, an EF means the basic classification unit of a manufacturer's product line used for the purpose of test fleet selection and determined in accordance with (40 CFR §86.420-78). 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 into Engine Families (EF)

First, group your product line into engine displacement classes. There are four engine displacement classes:

Class I-A	less than 50 cubic centimeters (cc), currently CARB exempted
Class I-B	50 cc to < 170 cc
Class II	170 cc to < 280 cc
Class III	280 cc and above

Once you have grouped your product line into engine displacement classes, you should divide your product line for each engine displacement class into families of vehicles that are expected to have similar exhaust and evaporative emission characteristics throughout their useful life. You may group vehicles into the same engine family if they are the **same in all** of the following aspects ([40 CFR §86.420-78](#)):

- (1) The combustion cycle.
- (2) The cooling system (liquid-cooled vs. air-cooled).
- (3) The cylinder configuration (inline, vee, opposed, bore spacing, etc.)
- (4) The number of cylinders.
- (5) The engine displacement class (40 CFR §86.419)
- (6) Method of air aspiration.
- (7) The number, location, volume, and composition of catalytic converters.
- (8) The thermal reactor characteristics.
- (9) The number of carburetors (or number of fuel injectors).
- (10) The pre-chamber characteristic.

Note: Crankcase evaporative emissions may not be discharged directly into the ambient atmosphere from any vehicle. (Ref: [40 CFR §86.410-2006\(d\)](#))

### How to name an Engine Family?

To facilitate the certification process, EPA/CARB 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 HMCs:

Number of Characters	Column	Description
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 “C” to represent HMC).
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		<p><b>(1) 5XYCC0125AE7:</b> Where: “5”- for 2005 MY engine family, “XYC”-manufacturer, “C”-HMC, “0125”- displacement 125 cubic inches, “AE7”- manufacturer specified code.</p> <p><b>(2) 6XYCC.072A6B:</b> Where: “6”-2006 MY engine family, “XYC”-manufacturer, “C”-HMC, “.072”-.072 liter (the displacement is in liters since a decimal point is entered), “A6B”- manufacturer specified code.</p>

\* 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.

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

The EPA emission standards required for 2006 and later model year Highway Motorcycles are summarized in Attachment 4:

Table 1: EPA's HMC Tier 1 Exhaust Emission Standards for 2006 and Later MY

Table 2: EPA's HMC Tier 2 Exhaust Emission Standards for 2010 and Later MY

Table 3: EPA's Averaging Provisions and FEL caps

Table 4: EPA's Permeation Emission Standards for 2006 and later Model years

Two types of emission tests are required to demonstrate that vehicles your company manufactures comply with exhaust standards as specified in [§86.410-2006 \(for CARB, 13 CCR Section 1958\)](#) and evaporative emission standards as specified in [§1051.110 \(for CARB, 13 CCR Section 1976\)](#):

- 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, the evaporative emissions standard applies to the whole vehicle.

*The CARB emission standards required for 2004 and later model year Highway Motorcycles are summarized in Attachment 5.*

#### **Test for Exhaust Emissions**

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

- 1) Select a test vehicle from each EF (Ref: 40 CFR [§86.421-78](#))
- 2) Conduct service accumulation (Ref: [§86.426-78](#))
- 3) Conduct durability tests to generate Deterioration Factors (DF) for each regulated pollutant (Ref: [§86.432-78](#))
- 4) Conduct emissions tests, at least 4 test points required within half useful life (Ref: [§86.427-78](#))
- 5) Demonstrate compliance with the required emission standards by comparing end-of-useful life emissions with the applicable emission standards (Ref: [§86.435-78](#))

For exhaust emission tests use the appropriate equipment, procedures, and duty cycles as specified in 40 CFR Part 86, Subpart F.

For highway-motorcycles with a displacement less than 50 cc use the testing procedures described in [§86.515-78](#) to meet the emissions standards set forth in [§86.410-2006](#). Highway-motorcycles with less than 50cc displacement class are currently CARB exempt.

In certain cases, you may use previously generated emission data instead of conducting new tests for a new certificate. See [§86.448-2006](#) for details.

If you are a small-volume manufacturer (SVM) with fewer than 500 employees worldwide and producing fewer than 3,000 motorcycles per year in the U.S., you are not required to comply with the Tier 1 standards until the 2008 model year and are not required to comply with the Tier 2 standards applicable to Class III motorcycles.

*For CARB, an SVM is defined as a manufacturer with total combined (Class IB, II, and III) California sales less than 300 annually. Class III HMC produced by an SVM must comply with “Tier I” standards starting from MY2008.*

## **Test for Evaporative Emissions**

### **A. EPA Permeation Emissions (not reviewed by CARB)**

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\(c\)\(1\)](#)).

#### Reference:

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?

### ***B. CARB Evaporative Emissions***

*The evaporative hydrocarbon emissions standard is in [13 CCR Section 1976](#) and applies to the whole vehicle. The standard is 2.0 grams per test. Motorcycles certified at 1.8 grams per test or lower are exempt from compliance with California specifications for fill pipes and openings of motor vehicle fuel tanks (the Specifications).*

*Class III motorcycles produced by a manufacturer with less than 500 total sales per year of all Classes may use a CARB-assigned DF instead of conducting emission test to develop a DF ([13 CCR Section 1976](#)).*

### **EPA/CARB Audits**

EPA/CARB may conduct certification confirmatory 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 §86.434-78 and [40 CFR Part 1068 Subpart E](#)).

## 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 - HMC Guidance 2 of 2: **RECOMMENDED APPLICATION FORMAT FOR CERTIFICATION OF HIGHWAY MOTORCYCLES**. 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: [§86.413-78](#))
- request to become an EPA-designated small volume manufacturer (Ref: [§86.437-78](#)).

### Application Amendments Prior to Certification

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

### Application Package:

#### **EPA/[CARB](#) Package Content and Method of Submission (for 2006 and later model years)**

Manufacturers are required to separately send electronic application packages to EPA/[CARB](#) for certification review. *For [CARB](#) certification review, manufacturers are required to mail either a CD (with cover letter) or a hardcopy application.* The package must, at a minimum, include:



EPA/CARB Application Package Content (Three sections)	File Format	Submission Time	Method of Submission
1) <b>Common Application Information, if any</b> (Both CBI <sup>(1)</sup> and FOIA <sup>(2)</sup> copies) that applies to multiple/all engine family including, but is not limited to, phase –in reports, AB reports, production reports, warranty information, compliance statements, CARB corporate average plan, etc.	PDF	Should be submitted at the beginning of a new model year, and then updated through out the model year as necessary.	<ol style="list-style-type: none"> <li>1. Name your files according to EPA file naming protocol (Attachment 2).</li> <li>2. Save your application files (CBI files and FOIA files) and CSI file on an electronic media, preferably a CD-ROM.</li> <li>3. Mail to EPA/CARB as specified in Step 6 of this Guidance.</li> </ol> <p>Note: EPA will update method of submission timely with VERIFY progress through future Dear Manufacturers letters</p>
2) <b>Individual Engine Family Application</b> (Both CBI and FOIA copies): <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 according to 40CFR 86.416-80</li> <li>• A Fee Payment Form (only required by EPA certification)</li> <li>• California E.O, if sales area is “California only” (only required by EPA certification)</li> <li>• <i>EPA certificate for 50 states families certified in CA ( can be submitted upon issuance) (Only required for CARB certification)</i></li> </ul>	PDF	Should be submitted whenever you apply for a new certificate of conformity for an engine family or whenever you make update to an engine family.	
3) <b>Certification Summary Information (CSI) File</b>	XML <sup>(3)</sup>		

Note:

- (1) CBI file: A complete application file that includes Business Confidential Information (CBI);
- (2) FOIA file: A complete application file, after remove all of Business Confidential Information so that it is readily releasable to the public after your vehicles are introduced into commerce.
- (3) XML file: When you complete the CSI via EPA’s interactive web site and saved the data file on your computer, the data file will be in XML format which can be readily download to a CD-ROM and send to EPA/CARB.

### **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 and banking plans, if any
- warranty statements

- emission-related maintenance instructions you intend to provide to the owners of your vehicles/engines

### 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
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 require certification fees to be paid at the end of the year based on total production for California sales.*

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

Before the new EPA computer system (VERIFY) completes its full development for this program, 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. has been 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 mail your **electronic** application package (preferably on a CD-ROM) to the EPA. 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-ROM (with cover letter) or hard copy application to CARB in addition to the electronic portion of the application:*

*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 receive certification application electronically at same time and will permit manufacturers to submit their data and application package in one of three ways:

- 1) **Upload manufacturers' data (CSI) and files (application text document) 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 files 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.

### **Step7. 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, two labels are required for each new vehicle you produced:

- a permanent and unique Vehicle Identification Number (VIN) (§86.414-78);
- a permanent Vehicle Emission Control Information (VECI) label (§86.413-78)

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

#### Reference:

40 CFR §86.413-78 Labeling

40 CFR §86.414-78 Submission of vehicle identification numbers

### Step 9: 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. Changes made after certification are called “running changes”.

Circumstances under which you must amend your application prior to taking the action, include, but are not limited to:

- 1) adding a new vehicle configuration to the certified engine family; or
- 2) modifying a FEL for a certified engine family; *[not permitted by CARB regulations; see Step 9] or*
- 3) changing a vehicle from its certified configuration in a way that may affect emissions.

For any above changes made after certification you must submit:

1. A request to EPA/CARB that highlights the planned changes and includes the information required in 40 CFR §86.438-78 and 40 CFR §86.439-78);
2. A complete revised application file; and
3. A revised CSI xml file.

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 §86.438-78 Amendments to the application.

40 CFR §86.439-78 Alternative procedure for notification of additions and changes.

### Step 10: Submit Required Reports

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

1. Actual production report (for each model & total) (Ref: 40 CFR §86.415-78(b))

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

*For CARB, manufacturers must submit quarterly production reports for Class III motorcycles certified under corporate averaging within 45 days after the end of each quarter. An End-of-Model Year production report for all certified engine families is required within 45 days after the end of the model year. For Class III motorcycles certified under corporate averaging, a final compliance report based on actual production must be submitted within 45 days after the end of the model year.*

### **Step 11: Provide Maintenance Instructions to Purchasers of Vehicles, Provide Warranty Service Information, Provide Information Regarding Service of Process in U.S., Submit Defect Reports and Conduct Vehicle Recalls, if Any.**

#### **Maintenance Instructions:**

40 CFR §[86.428-80](#) 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.

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 Section 207(a) of the Clean Air Act (42 U.S.C. 7541(a)). You are required to describe in the owner's manual the emission-related warranty provisions that apply to your vehicles/ engines. You must also provide a list of the warranty period by classes in your application, if they differ with the minimum required warranty periods.

#### **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 exists in twenty-five or more vehicles of the same model. (Ref: 40 CFR §[85.1903](#)).

You have 15 days to submit a defect report after an emission defect is found to affect twenty-five or more from the same model.

### Service of Process Located in the United States

Name an agent for service of process located in the United States. Service on this agent constitutes service on you or any of your officers or employees for any action by EPA or otherwise by the United States related to the requirements of this part.

#### Information to be Included:

- Contact information of your U.S. agent whom EPA can contact with for emission compliance, warranty and other issues
- Service of Process information:
  - i. A list or website references that contains all U.S. based repair facilities that will be responsible for supplying parts and emission warranty service to vehicle owners. Outline how you plan to train those service personnel and provide emission warranty service information to them.
  - ii. Description of how a vehicle owner can obtain emission warranty service.
  - iii. Description of how you plan to track emission related defect claims and submit defect reports to EPA.
  - iv. Description of how you plan to maintain a database of owner's names and addresses to be used for notification in the event of an emissions recall
  - v. For U.S. importers, a legal agreement between you and a foreign OEM that specifies who is responsible for the above mentioned Service of Process.

#### Advice for Submittal and Record Keeping:

- You may submit the required information with the Common Section of your application for the first application of a new model year and provide a reference in each individual application.
- Keep all required information on file for at least 5 years and make it readily available to EPA upon request.
- For a U.S. importer, the legal agreement between you and a foreign vehicles/engines manufacturer shall include a letter from the OEM (on the OEM's letterhead and signed by a vice president or higher) authorizing the applicant to import and distribute motorcycles in the U.S. The agreement shall include the following:
  - **Completely identify the OEM.** Include all company names, aliases, subsidiary companies, parent companies and subcontractors associated with the manufacturer of motorcycles/ATVs. Provide the history of the OEM, number of years the OEM has been in business, the official OEM website; the number and locations of all manufacturing plants, the number of employees. Provide the name address, telephone number and email address of key personnel including plant manager(s). Provide a complete list of motorcycles/ATV models, engines and other products manufactured by the OEM (identified by make, model and engine).
  - **Identify all Importers authorized to import the OEM's motorcycles/engines into the U.S.** Provide the number of motorcycles and engines (identified by make, model, engine size and engine type) which are 1) produced annually by the

- OEM and 2) which are imported into the U.S. (including models imported by other importers).
- **Authorize the U.S. importer to import your products.** Completely identify the applicant (who will be issued a certificate for your products). Include all company names, aliases, subsidiary companies, parent companies and subcontractors associated with the importation of motorcycles. Provide the history of the Importer, number of years the Importer has been in business, the official Importer website; the number and location of all Importer offices, and the number of Importer employees. Provide the name address, telephone number and email address of key Importer personnel.
  - **Identify the U.S. importer (certificate holder)'s obligations to the OEM.**
  - **Identify the OEM's obligations to the U.S. importer (certificate holder).**
  - **Identify the models which the applicant is authorized to import:** Provide a complete list of motorcycle models, engines and other products authorized to be imported by the Importer (identified by nameplate, make, model, engine size, engine type and the quantity imported). Include vehicles and engines in this and other engine families intended for certification during the model year. Indicate whether such vehicles and engines will comply with U.S. emission requirements when they leave the OEM factory.
  - **Assure that "Service of Process" is provided to EPA and vehicle Owners.** Identify who will be responsible for supplying parts, service, and warranty service to customers. Outline who will be responsible to establish a dealer network, and provide service information and training to dealer service personnel. Describe how customer feedback will be provided from customers and dealers to the importer and to the manufacturer. Describe how the certificate holder (the importer) will be made aware of any emission-related running changes made to production motorcycles or engines. Provide the name and contact information of an authorized representative of the manufacturer (normally the importer/certificate holder) who EPA can contact for emission compliance, warranty and other issues.

### **Reference**

§85.1903 Emissions defect information report.

§85.1904 Voluntary emissions recall report; quarterly reports.

§1051.205(w) Information regarding service of process located in the United States

**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 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, including how, when, where and by whom the vehicles are initially manufactured or assembled; how, when, where and by whom the vehicles will be modified (if applicable) following initial assembly. Also describe briefly how, when, where and by whom the vehicles 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 you intend to certify during the model year in question? Please provide breakdown sales numbers for each vehicle or engine displacement category (Class I, Class II, or Class III)
- 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 will be identical in all material respects to the motorcycles described in application for certification?
- 8) 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))?

- 9) 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.
- 12) For California Air Resources Board (CARB) certification, please provide your estimation for the total number of vehicles to be sold into the State of California. This is used to determine if you qualify as a small volume manufacturer (less than 300 units per model year).

Attachment 2:

## **EPA/CARB Guidance on Electronic File Naming for Motorcycles and ATVs**

### **A. Naming a Data File for Certification Summary Information (CSI) (.xml format):**

EPA CDX system will **assign** a name for your CSI data file when you try to save it. You should use the default file name for your application submission. The default CSI file name consists of two sections:

**[Engine Family Name]\_[Date and Time].pdf**

CSI data set is unique to each engine family and does not need a confidentiality indicator since EPA's VERIFY computer system will be able to selectively release non-confidential information only for any public information request (FOIA request).

### **B. Naming a Document File (PDF format)**

A name of a document file consists of four sections:

**Confidentiality\_ Applicability\_ Information Type\_ Version Indicator. PDF**

Each section has multi-elements as listed in the following table (continued on next page):

<p><u>Section 1</u> <b>Confidentiality</b> (3 characters + underscore)</p>	<p><u>Section 2</u> <b>Applicability</b> (12 characters + underscore)</p>	<p><u>Section 3</u> <b>Information Type</b> (7 characters + underscore)</p>	<p><u>Section 4</u> <b>Version Indicator</b> (3 characters)</p>
<ul style="list-style-type: none"> <li>• <b>CBI_</b>: a confidential file that will not be released to the public</li> <li>• <b>FOI_</b>: a non-confidential file after remove confidential information from a CBI file so that it is readily releasable to the public after your vehicles/engines are introduced into commerce</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Engine Family Name_</b>: an individual engine family related file</li> <li>• <sup>(2)</sup><b>XXXXX_COMMON_</b>: any Common Information submittals</li> <li>• <sup>(3)</sup><b>XXXXCARB_RED_</b>: California Blue Sticker vehicles</li> <li>• <b>Evaporative Family Name_</b>: Individual evaporative family related file (for LDT/LDV/HDV); however, for California <sup>(4)</sup><b>SORE</b> use the following format: <b>XXXXEvpYYZZZ</b> where, <b>Evp</b>=Sore evaporative, <b>YY</b>=CARB SORE evaporative/permeation code, <b>ZZZ</b>=mfr’s own specific designator</li> </ul> <p><i>Note:</i></p> <p><sup>(1)</sup> See Major Step 2 of this Guidance for engine family naming convention</p> <p><sup>(2)</sup> “XXXXX” is the first five characters of a mfr’s engine family name, e.g. “model year + EPA MFR code + Family Type Code”.</p> <p><sup>(3)</sup> “XXXX” is the first four characters of an EF name, e.g. “model year + EPA MFR code”</p> <p><sup>(4)</sup> “XXXXE” are the first five characters of the mfr’s evaporative family name, e.g. “model year + EPA MFR code + Evaporative category code”.</p>	<p style="text-align: center;"><b>Application for Certification</b></p> <ul style="list-style-type: none"> <li>• <b>APP_INI_</b>: Initial Application submittal</li> <li>• <b>APP_FIN_</b>: Final Application submittal</li> <li>• <b>APP_UPD_</b>: Updated Application submittal (for LDT/LDV only)</li> <li>• <b>APP_C##_</b>: application running change</li> <li>• <b>APP_F##_</b>: application field fix</li> </ul> <p style="text-align: center;"><i>Note: ## equals 01 ~99 in numerical order</i></p> <p style="text-align: center;"><b>Other Standalone Documents (To be updated as needed)</b></p> <p><b>Request for Approval (“RFA ”):</b></p> <ul style="list-style-type: none"> <li>• <b>RFA_LAB_</b>: label content</li> <li>• <b>RFA_DFP_</b>: durability plan</li> <li>• <b>RFA_CAP_</b>: Corp. Ave. plan</li> <li>• <b>RFA_PLT_</b>: Production Line Testing Plan</li> <li>• <b>RFA_STP_</b>: Special Test Procedure</li> <li>• <b>RFA_ABT_</b>: Averaging, Banking , Trading Plan</li> <li>• <b>RFA_WAR_</b>: Warranty Content</li> <li>• <b>RFA_OBD_</b>: On-Board Diagnostics</li> <li>• <b>RFA_FTP_</b>: Functional Test Plan</li> <li>• <b>RFA_PHS_</b>: Phase In Plan</li> </ul> <p><b>Compliance Reports (CR#<sup>(4)</sup>):</b></p> <ul style="list-style-type: none"> <li>• <b>CR#_DRE_</b>: Defect report</li> <li>• <b>CR#_PDR_</b>: Production report</li> <li>• <b>CR#_ABT_</b>: ABT report</li> <li>• <b>CR#_PLT_</b>: Production Line Test report</li> <li>• <b>CR#_VIN_</b>: Vehicle VIN report</li> <li>• <b>CR#_CAR_</b>: Corporate Averaging report</li> <li>• <b>CR#_VER_</b>: Voluntary emission recall report</li> <li>• <b>CR#_QTR_</b>: Quarterly Production Report (CARB only)</li> </ul> <p><i>Note:</i></p> <p><sup>(4)</sup> “#” should be 1, 2, 3,... etc. represents Report No.1 or first quarter, Report No2 or second quarter, ...</p>	<ul style="list-style-type: none"> <li>• <b>R00</b>: original</li> <li>• <b>R01</b>: 1<sup>st</sup> revision</li> <li>• <b>R02</b>: 2<sup>nd</sup> revision</li> <li>• ..... etc.</li> </ul>

Examples:

For 2006 model year, application submitted by manufacturer ABC, for ATVs with engine family name 6ABCX1.20DEF

**b1. Example Names for Application Files with Common Information**

<b>Application File Name</b>	<b>Name Explanation</b>
<b>CBI-6ABCX_COMMON_APP_INI_R00</b>	Confidential file, for 2006 MY, company ABC, for ATVs, common information for application of certification, initial submission.
<b>CBI-6ABCX_COMMON_APP_C01_R00</b>	Confidential file, for 2006 MY, company ABC, for ATVs, common information for application of certification, first Running Change. (i.e., change in catalyst formulation encompassing several engine families using the same catalytic converter during model-year production)
<b>CBI-6ABCX_COMMON_APP_F01_R00</b>	Confidential file, for 2006 MY, company ABC, for ATVs, common information for application of certification, first Field Fix. (i.e., change in catalyst formulation encompassing several engine families using the same catalytic converter for post sales products)
<b>FOI-6ABCX_COMMON_APP_FIN_R00</b>	Public file with CBI removed, for 2006 MY, company ABC, for ATVs, common information for application of certification, final submission.

**b2. Example Names for Application Files for Individual Engine Family**

<b>Application File Name</b>	<b>Name Explanation</b>
<b>CBI_6ABCX1.20DEF_APP_INI_R00</b>	Confidential file, for engine family 6ABCX1.20DEF, application of certification, original submission.
<b>CBI_6ABCX1.20DEF_APP_INI_R01</b>	Confidential file, for engine family 6ABCX1.20DEF, application of certification, 1st revision to original submission.
<b>CBI_6ABCX1.20DEF_APP_C01_R00</b>	Confidential file, for engine family 6ABCX1.20DEF, application of certification, First Running Change (i.e., .
<b>FOI_6ABCX1.20DEF_APP_FIN_R00</b>	Public file with CBI removed, for engine family 6ABCX1.20DEF, application of certification, final submission.
<b>FOI_6ABCX1.20DEF_APP_FIN_R01</b>	Public file with CBI removed, for engine family 6ABCX1.20DEF, application of certification, 1st revision to final submission.

**b3. Example Names for Other Standalone Documents:**

<b>Standalone File Name</b>	<b>Name Explanation</b>
<b>CBI-6ABCX_COMMON_RAF_CAP_R00</b>	Confidential file, for model year 2006, company ABC, ATV, common to multi/all engine family, request for approval for Corporate Averaging Plan, original submission.
<b>FOI-6ABCX_COMMON_RFA_LAB_R01</b>	Public file, for model year 2006, company ABC, ATV, common to multi/all engine family, request for approval for VECI label content, 1 <sup>st</sup> revision to the original submission.
<b>CBI-6ABCX1.20DEF_CR1_DRE_R00</b>	Confidential file, for engine family 6ABCX1.20DEF, number 1 Defect Report, original submission.
<b>FOI-6ABCX1.20DEF_CR2_PLT_R01</b>	Public file, for engine family 6ABCX1.20DEF, number 1 production Line Test Report, 1 <sup>st</sup> revision to the original submission.

**Attachment 4:**

**Table 1: EPA Tier 1 Highway Motorcycle Exhaust Standards: Effective 2006 Model Year**

Class	Displacement	Useful Life	HC	CO	NO <sub>x</sub>
Class I-A	<50 cc	5yr/6000 km	1.0 g/km*	12 g/km	n/a*
Class I-B	50-169 cc	5yr/12000 km			
Class II	170-279 cc	5yr/18000 km			
			HC+NO <sub>x</sub>	CO	NO <sub>x</sub>
Class III	>279 cc	5yr/30000 km	1.4 g/km	12 g/km	

\* Optional HC+NO<sub>x</sub> standard of 1.4 g/km

**Table 2: EPA Tier 2 Highway Motorcycle Exhaust Standards: Effective 2010 Model Year**

Class	Displacement	Useful Life	HC+NO <sub>x</sub>	CO	NO <sub>x</sub>
Class III	>279 cc	5 yr/ 30000 km	0.8 g/km	12 g/km	n/a

**Table 3: Averaging Provisions and FEL Caps**

$$\text{Emission level} = [\sum(\text{FEL}) \times (\text{Useful Life}) \times (\text{Production})] / [\sum(\text{Production}) \times (\text{Useful Life})]$$

Class	Tier	Model Year	HC+NO <sub>x</sub> FEL Cap (g/km)
Class I or II	Tier 1	2006 and later	5.0
Class III	Tier 1	2006-2009	5.0
	Tier 2	2010 and later	2.5

**Table 4: EPA Permeation Standards: Effective 2008 Model Year**

Equipment	Unit	HC	Phase-in MY	Test Procedure	Note
Fuel Tank	g/m <sup>2</sup> /day at 82°F	1.5	2008 and Later: 100%	40 CFR 1051.515	<ul style="list-style-type: none"> <li>• ABT is allowed for tanks only</li> </ul>
Fuel Hose	g/m <sup>2</sup> /day at 73°F	15		Pre-conditioning: §1051.501(c)(2) Permeation Test: 40 CFR 1051.810 (SAE J30)	<ul style="list-style-type: none"> <li>• Certification by design is an option.</li> </ul>

**Attachment 5:**

**CARB Exhaust and Evaporative Emission Standards**

For a complete description of emission standards see 13 CCR Section 1958 for exhaust emissions and 13 CCR Section 1976 for evaporative emissions.

**A. Exhaust Emission Standards**

Model-Year	Engine Displacement (in cubic centimeters)	Exhaust Emission Standards (grams per kilometer)	
		Hydrocarbon (HC) + Oxides of Nitrogen (NOx)	Carbon Monoxide
1978 to 1979	50 to less than 170	5.0 (HC only)	17
1978 to 1979	170 to less than 750	5.0 + 0.0155(D-170)* (HC only)	17
1978 to 1979	750 or greater	14 (HC only)	17
1980 to 1981	All (50 cc or larger)	5.0 (HC only)	17
1982 and subsequent	50 cc to 279 cc	1.0 (HC only)	12
1982 through 1985 (manufactured prior to March 1, 1985)	280 cc or greater	2.5 (HC only)	12
1985 (manufactured after February 28, 1985) through 1987	280 cc or greater	1.4 (HC only), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12
1988 through 2003	280 cc to 699 cc	1.0 (HC only), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12
1988 through 2003	700 cc or greater	1.4 (HC only), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12
2004 through 2007	280 cc or greater	1.4 (HC + NOx), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12
2008 and subsequent	280 cc or greater	0.8 (HC + NOx), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12

\*D = engine displacement of motorcycles in cubic centimeters.

\*\*Compliance with a standard to be applied as a corporate average shall be determined as follows:

**B. Evaporative Emission Standards**

Motorcycle Class	Model Year	Hydrocarbons (grams per test)
Class I and II (50 to <280cc)	1983 and 1984	6.0
	1985 and subsequent	2.0
Class III (280cc and larger)	1984 and 1985	6.0
	1986 and subsequent	2.0