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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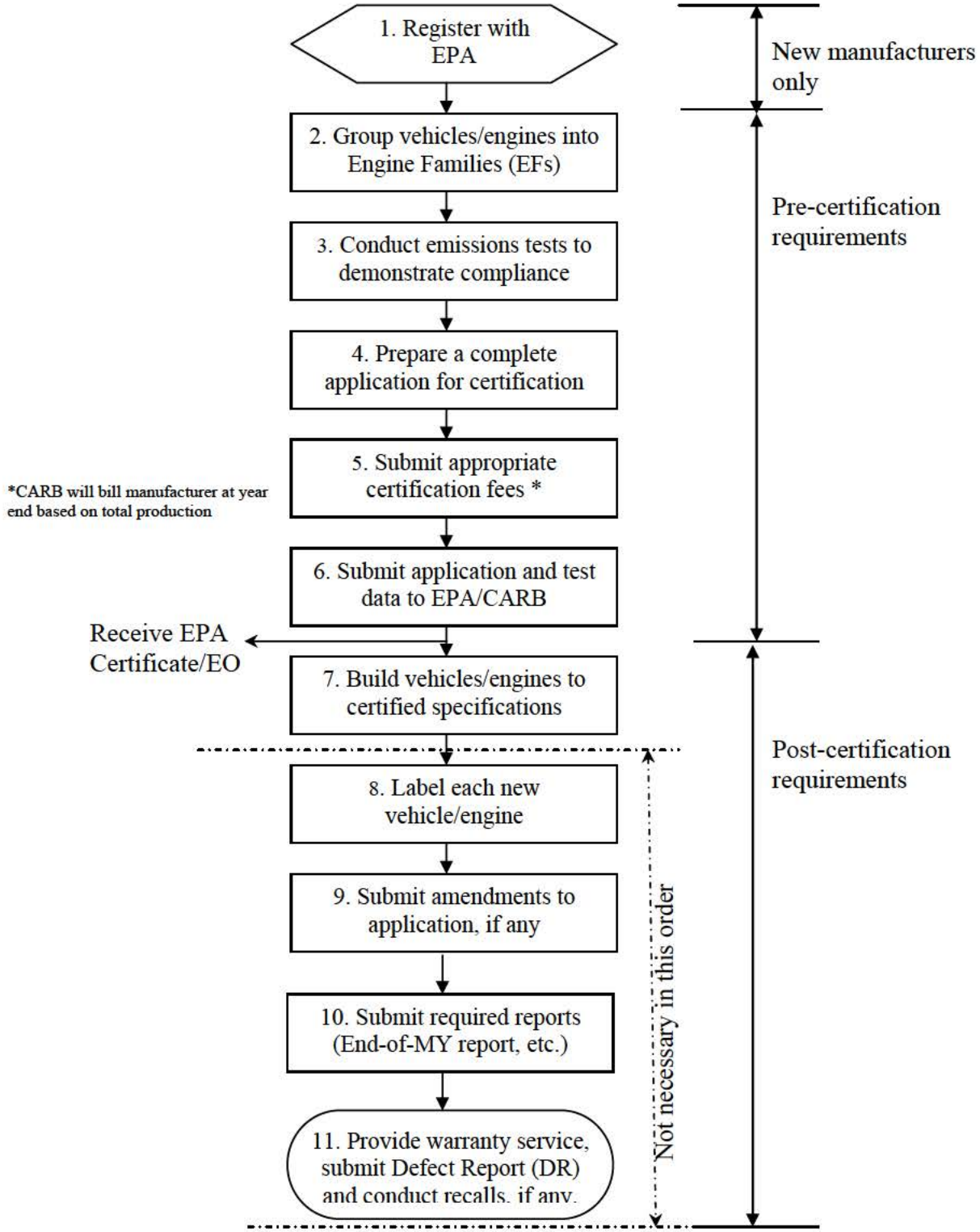

Revision: 3/3/05

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. Under "New Manufacturer Registration" section, download the electronic Manufacturer Code Entry Form, complete it and email it to us at 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 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	**Model Year** (e.g. use "6" if you intend to obtain a 2006 MY certificate)
3	2-4	**Three letter manufacturer identification code** assigned by EPA at the time you register your company with EPA
1	5	**Vehicle Type** (use the letter "C" to represent HMC).
4	6-9	**Displacement** 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	**Sequence characters specified by a manufacturer**. 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	**(1) 5XYCC0125AE7**: Where: "5"- for 2005 MY engine family, "XYC"-manufacturer, "C"-HMC, "0125"- displacement 125 cubic inches, "AE7"- manufacturer specified code. **(2) 6XYCC.072A6B:** 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.	

* 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, NOx, HC and CO_2 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 1" 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^2/day) for a fuel tank and 15 grams per square meter per day (15 g/m^2/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) **Common Application Information, if any** (Both CBI(1) and FOIA(2) 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.	1. Name your files according to EPA file naming protocol (Attachment 2). 2. Save your application files (CBI files and FOIA files) and CSI file on an electronic media, preferably a CD-ROM. 3. Mail to EPA/CARB as specified in Step 6 of this Guidance. Note: EPA will update method of submission timely with VERIFY progress through future Dear Manufacturers letters
2) **Individual Engine Family Application** (Both CBI and FOIA copies): • A cover letter signed by an authorized representative of your company • Complete content of application for certification according to 40CFR 86.416-80 • A Fee Payment Form (only required by EPA certification) • California E.O, if sales area is "California only" (only required by EPA certification) • *EPA certificate for 50 states families certified in CA (can be submitted upon issuance) (Only required for CARB certification)*	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) Certification Summary Information (CSI) File	XML(3)		

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 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. 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).

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):

Section 1 **Confidentiality** (3 characters + underscore)	Section 2 **Applicability** (12 characters + underscore)	Section 3 **Information Type** (7 characters + underscore)	Section 4 Version Indicator (3 characters)
• **CBI_:** a confidential file that will not be released to the public • **FOI _:** 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	• **Engine Family Name_:** an individual engine family related file • [(2)]**XXXXX_COMMON_:** any Common Information submittals • [(3)]**XXXXCARB_RED_:** California Red Sticker vehicles • **Evaporative Family Name_:** Individual evaporative family related file (for LDT/LDV/HDV); however, for California [(4)]**SORE** use the following format: XXXX*EvpYYZZZ* where, *Evp*=Sore evaporative, *YY*=CARB SORE evaporative/permeation code, *ZZZ*=mfr's own specific designator *Note:* *(1) See Major Step 2 of this Guidance for engine family naming convention* *(2) "XXXXX" is the first five characters of a mfr's engine family name, e.g. "model year + EPA MFR code + Family Type Code".* *(3) "XXXX" is the first four characters of an EF name, e.g. "model year + EPA MFR code"* *(4) "XXXXE" are the first five characters of the mfr's evaporative family name, e.g. "model year + EPA MFR code + Evaporative category code".*	**Application for Certification** • **APP_INI_:** Initial Application submittal • **APP_FIN_:** Final Application submittal • **APP_UPD_:** Updated Application submittal (for LDT/LDV only) • **APP_C##_:** application running change • **APP_F##_:** application field fix *Note: ## equals 01 ~99 in numerical order* **Other Standalone Documents (To be updated as needed)** **Request for Approval ("RFA_"):** • **RFA_ LAB_:** label content • **RFA_DFP_:** durability plan • **RFA_CAP_:** Corp. Ave. plan • **RFA_PLT_:** Production Line Testing Plan • **RFA_STP_**: Special Test Procedure • **RFA_ABT_:** Averaging, Banking , Trading Plan • **RFA_WAR_:** Warranty Content • **RFA_OBD_:** On-Board Diagonostics • **RFA_FTP_:** Functional Test Plan • **RFA_PHS_:** Phase In Plan **Compliance Reports (CR#[(4)]):** • **CR#_DRE_:** Defect report • **CR#_PDR_:** Production report • **CR#_ABT_:** ABT report • **CR#_PLT_:** Production Line Test report • **CR#_VIN_:** Vehicle VIN report • **CR#_ CAR_:** Corporate Averaging report • **CR#_VER_:** Voluntary emission recall report • **CR#_QTR_:** Quarterly Production Report *(CARB only)* *Note:* *(4) "#"should be 1, 2, 3,... etc. represents Report No.1 or first quarter, Report No2 or second quarter, ...*	• **R00:** original • **R01:** 1st revision • **R02:** 2nd revision • ..... etc.

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

Application File Name	Name Explanation
CBI-6ABCX_COMMON_APP_INI_R00	Confidential file, for 2006 MY, company ABC, for ATVs, common information for application of certification, initial submission.
CBI-6ABCX_COMMON_APP_C01_R00	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)
CBI-6ABCX_COMMON_APP_F01_R00	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)
FOI-6ABCX_COMMON_APP_FIN_R00	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

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

Standalone File Name	Name Explanation
CBI-6ABCX_COMMON_RAF_CAP_R00	Confidential file, for model year 2006, company ABC, ATV, common to multi/all engine family, request for approval for Corporate Averaging Plan, original submission.
FOI-6ABCX_COMMON_RFA_LAB_R01	Public file, for model year 2006, company ABC, ATV, common to multi/all engine family, request for approval for VECI label content, 1st revision to the original submission.
CBI-6ABCX1.20DEF_CR1_DRE_R00	Confidential file, for engine family 6ABCX1.20DEF, number 1 Defect Report, original submission.
FOI-6ABCX1.20DEF_CR2_PLT_R01	Public file, for engine family 6ABCX1.20DEF, number 1 production Line Test Report, 1st 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	NOx
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+NOx	CO	NOx
Class III	>279 cc	5yr/30000 km	1.4 g/km	12 g/km	

* Optional HC+NOx standard of 1.4 g/km

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

Class	Displacement	Useful Life	HC+NOx	CO	NOx
Class III	>279 cc	5 yr/ 30000 km	0.8 g/km	12 g/km	n/a

Table 3: Averaging Provisions and FEL Caps

Emission level = [∑(FEL)x(Useful Life)x(Production)]/[∑(Production)x(Useful Life)]

Class	Tier	Model Year	HC+NOx 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^2/day at 82°F	1.5	2008 and Later: 100%	40 CFR 1051.515	• ABT is allowed for tanks only • Certification by design is an option.
Fuel Hose	g/m^2/day at 73°F	15		Pre-conditioning: §1051.501(c)(2) Permeation Test: 40 CFR 1051.810 (SAE J30)	

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 1985 and subsequent	6.0 2.0
Class III (280cc and larger)	1984 and 1985 1986 and subsequent	6.0 2.0

Recommended Application Format
for
Certification of Highway Motorcycles

To expedite review of your application for certification, the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) strongly recommend that you adopt the standardized application format presented in this Guidance. While other formats may be acceptable, they may result in longer EPA/CARB review time.

The recommended application format is based on the requirements specified in 40 CFR §86 Subpart E (amended on January 15, 2004 and are subject to change through future regulatory amendments) and *corresponding CARB's Standards and Test Procedures (CaSTP). In this guidance, citations to 40 CFR §1051 shall also mean references to the corresponding CaSTP for the same requirements unless noted otherwise.*

Please note that EPA and CARB regulations differ in certain requirements. 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 but concurrently*** *addressed to and ruled on by EPA and CARB.*

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March 9, 2005

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

California Air Resources Board

Recommended Application Format

Part A. Common Information
Part B. Individual Engine Family Application

1. Request for Certification
2. Correspondence and Communications
3. Certification Summary Information (CSI)
4. 40 CFR §86.416-80 Application Requirements
5. Averaging and Banking Requirements, if any.
6. Additional California Requirements (reserved)

Part A. Common Information (to be submitted with your **first** application for a new model year and must be updated when changes occur before and after certification)

You may submit certain information which is common to more than one engine family (EF) in Part A, rather than in Part B for an individual EF's application. If you do so, you may reference the information rather than submit it within Part B application. We have made suggestions, in each section of Part B below, of information that can usually be submitted as common information.

Part B. Individual Engine Family Application (to be submitted for **each** engine family for a new model year and must be updated when changes occur before and after certification)

1. Request for Certification

EPA will issue a certificate to a U.S. manufacturer or the authorized U.S. importer/distributor for non-U.S. manufacturers. The request for an EPA certificate and/or CARB Executive Order (EO) should contain the following information:

- Certificate holder's company name, address and contact information (must have "service of process" in the U.S.)
- Address and location of facility where the motorcycles will be produced
- Manufacturer's legal name
- Name of the engine family that you intend to apply for a certificate/EO
- All applicable vehicle categories (see Part B.4(a)) within the EF.
- Statements that the EF complies with all applicable EPA/CARB regulations
- Primary certification contact for questions: name, title, phone and email addresses.
- Signature of an authorized company representative.

Advice for Submittal:

- Organize the above information as a cover letter. *Note: CARB requires an original signed cover letter to be submitted in paper format.*
- Identify your company's primary certification contact by "For questions call..."

- In general, you should plan for at least 30 days for EPA/CARB to review and issue a certificate/EO from the time a complete application is submitted. However, if you have a special need for an expedited review, please indicate in the letter.

2. Correspondence and Communications

Information to be Included:

- Names, titles, phone numbers, fax numbers, e-mail addresses and areas of responsibility of all persons authorized to be in contact with EPA/CARB compliance staff. **At least one U.S. contact must be provided.**
- Dedicated Email address (one per company) for EPA to send certificates and any other official documents.
- U.S. mail address where EPA may mail official document if email is not appropriate path.
- U.S. mail address where CARB will mail official documents, if different from above.

Advice for Submittal:

- Supply complete list of contacts in Part A.
- Create a dedicated email address to receive your certificate. We strongly recommend that you use the format certificate@[company].com for your company to receive certificates and any other official documents.

3. Certification Summary Information (CSI)

The Certification Summary Information (CSI) (See Guidance 2, Attachment 1: CSI) is the printout summary of data that you entered into the EPA/CARB database for this engine family prior to preparing this application (A separate guidance regarding submitting data into EPA/CARB database will be provided when the database is ready). The CSI is comprised of the following sections:

1: General Information
2: EPA/CARB Emission Standards and Certification Levels
3: Engine Family Description
4: Exhaust Emission Control Information
5: Exhaust Emission Data Vehicle and Test Data
6: Permeation Emissions Control and Test Data
7. Models Covered

Including the CSI in the application not only reduces submission of redundant information that is required in other sections of Part B but also provides manufacturer another chance to review the data entered into EPA/CARB database.

4. 40 CFR §86.416-78 (a) Application Requirements

(A) Engine Family (EF) Description (Ref: 40 CFR §86.420-78)

Describe the engine family's specifications and other basic parameters of the vehicle design. List the type of fuel you intend to use to certify the engine family. List vehicle configurations and model names that are included in the engine family.

Information to be included:

- Engine family name
- All applicable EPA/CARB vehicle categories within the EF:
  HMC (highway motorcycle);
  ENG (engine-only certification, see 40 CFR §86.448-2006 (not applicable for CARB)
- Any new technology applied
- Fuel type(s) (operating fuel(s)): gasoline, liquefied petroleum gas (LPG), methanol, or natural gas (NG), etc.
- The EF's specifications:
  - engine type, combustion cycle, displacement(s), rated power and torque, the number and arrangement of cylinders, appropriate bore diameter, and other basic vehicle parameters
  - engine cooling medium (air, liquid, oil, etc)
  - fuel system configuration, use SAE J1930 abbreviations:
    CARB - Carburetion
    TBI - throttle body fuel injection
    MFI – multi-port fuel injection
    SFI - sequential MFI
    DGI - direct gasoline injection
    AIR - secondary air injection
    PAIR - pulsed AIR, etc.
  - method of air aspiration (natural, turbocharged, supercharged, etc.)
  - Models covered (commercial model names, not manufacturer's model code names)

Advice for Submittal:

- Reference the appropriate sections on CSI for information required above.
- Fully describe the engine/emission-related components, evaporative and permeation components, and vehicle parameters for each model covered by the certificate.
- Outline the differences between California and federal models.
- *Alternatively, manufacturers may choose to provide two tables, one for the models for CARB certification and the other for EPA certification.*

(B) Emission Data Vehicle/Engine (EDV) Description (Ref: 40 CFR §86.421-78)

Describe the vehicles or engines you selected for testing to satisfy the certification requirements and the reasons for selecting them.

Information to be Included:

- Manufacturer's explanation for EDV selection (including justifications that the selected EDV meets the selection requirements under both EPA/CARB regulations, e.g. justify why a federal vehicle model selected for EDV for the EF meets CARB requirements; or,

vice versa, why a California vehicle model selected for EDV for the EF meets EPA requirements)
- Data type (new, carryover, or carry across)
- EDV ID (Vehicle Identification Number (VIN) or manufacturer's ID)
- EDV configuration
- EDV model name
- EDV displacement
- Engine calibration
- EDV transmission type
- EDV N/V
- EDV curb mass
- EIM
- Road Load (nt)
- Test number
- Test fuel
- Exhaust emission control systems
- Maintenance performed

Advice for Submittal:

- You may place a complete breakdown of your EDV information for a model year in Part A and refer the page number of Part A in this section.
- You may reference the appropriate CSI sections for test vehicle/engine information requested above.

(C) Vehicle Emission Control Information Label (Ref: 40 CFR §86.413-78)

The emission control information label and it's location shall be included in the application.

Information to be Included:
As specified in 40 CFR §86.413-78 and 86.416-80.

Advice for Submittal:
- Discuss with EPA/CARB in advance if you propose any changes other than specified in 40 CFR §86.413-78.
- Present a photocopy of the actual VECI label in the **same size** as the actual label, or an actual label.
- You may reference a complete set of photocopies of the labels for a model year in Part A.

(D) Emission Control Systems and Auxiliary Emission Control Devices (AECD) (Ref: 40 CFR §86.409-78)

Explain how the emission-control systems operate:
- Describe in detail all the system components for controlling exhaust emissions, including auxiliary emission-control devices and all fuel-system components you will install on any production or test vehicle or engine. Explain why any auxiliary

emission-control devices are not defeat devices (see 40 CFR §86.409-78). Do not include detailed calibrations for components unless we request them.
- Describe the permeation emission controls. This will not be reviewed by CARB.
- Describe in detail all the system components for controlling evaporative emissions, including auxiliary evaporative emission-control devices you will install on any production or test vehicle or engine. (For CARB only.)

For Exhaust Emission Control:

Information to be Included:

- The detailed description of your catalytic converters (type, number, location, arrangement (i.e., parallel or series)*, volume, compositions, etc)
- The number, location, arrangement (i.e., parallel or series)* and type of the sensors, if any
- Brief description of fuel-system
- Brief description of Exhaust Gas Recirculation (EGR) as applicable
- Brief description of air injection system as applicable
- Brief description of any other exhaust emission control system
- Part numbers of emission related component (part numbers as stamped on the component, not the stock or inventory numbers)

* Use prefix "2" and suffix "(2)" to designate parallel and series arrangements, respectively (e.g.,: 2OC means two oxidizing catalytic converters in a parallel arrangement; O2S(2) means two oxygen sensors in a series arrangement, one before and one after the catalytic converter).

Advice for Submittal:

- You may reference the appropriate sections in the CSI for some information required above.
- You may organize the emission related parts data in a table format.
- You may use schematics to illustrate control devices or strategies, if applicable.
- You may place any general descriptions or schematics in Part A.
- If you consider any of the catalyst information (volume, composition or ratio of the precious metals, etc.) to be confidential, create a code, such as "catalyst A" in a public file (name it ["FOI"_"EF Name"_"APP_INI"_"Date and Time".pdf]) of the application and describe the catalyst associated with the code in the confidential copy (with name ["CBI"_"EF Name"_"APP_INI"_"Date and Time".pdf]). Both files must be submitted to EPA/CARB.

Auxiliary Emission Control Devices (AECD):

Information to be Included:

List all AECDs installed on any applicable vehicles including the sensed and controlled parameters. A detailed justification for each AECD which results in a reduction in effectiveness of the emission control system and rationale why the AECD is not a defeat device as defined under 40 CFR §86.409-78 & §86.416-80.

Advice for Submittal:

- You may make a table, such as below, to list all AECDs, sensors, sensed and controlled parameters and justifications involved in the engine family:

AECD	Sensed Parameter	Sensor	Controlled Parameters					Justification/ Rationale
			Volt High	Volt Low				

You may reference a complete breakdown list of AECD tables for a model year in the common information section rather than re-describe them with each engine family.

If you consider any of the AECD information to be confidential, create a code in the public copy of the application and describe the confidential information associated with the code in the confidential copy. As mentioned above, both copies must be submitted to EPA/CARB.

(E) Adjustable Operating Parameters and Other Adjustments (Ref: 40 CFR §86.416-80)

Describe all adjustable operating parameters and other adjustments.

Information to be Included (Ref: 40 CFR §86.416-80 and §86.409-78):

- The nominal or recommended setting.
- The intended physically adjustable range, including production tolerances if they affect the range.
- The limits or stops used to establish adjustable ranges.

Advice for Submittal:

Organize the above required information by a table, such as below, when appropriate:

Adjustable Parameters	Nominal Setting	Adjustable Range	Tamper Resistance Method	Approval Reference

You may reference a complete breakdown of adjustable operating parameters for a model year in the Part A - Common Information and place reference # number here.

(F) Projected U.S./California Sales (Ref: 40 CFR §86.416-80(a)(2)(iii))

Include estimates of U.S. and California-directed production volumes

Information to be Included:
A list of projected U.S. and California sales for each model of the engine family.

(G) Test Equipment, Fuel, and Engine Lubricant (Ref: 40 CFR §86.416-80(a)(2)(iv))

Provide a description of any proposed test equipment, fuel and engine lubricant to be used for testing.

Describe any special or alternate test procedures and/or special test equipment you used. List the specifications of the test fuels to show that they fall within the required ranges.

Please note advanced EPA/CARB approvals are required before taking action.

Information to be Included:

- Provide the name and address of the test facility used to perform exhaust testing.
- Description of all EPA/CARB-approved special or alternate test procedures, special test equipment, durability procedures or driving schedules you used for exhaust, permeation, and evaporative (whole vehicle) emission tests.
- Lists of the test fuel specifications for both exhaust, permeation, and evaporative (whole vehicle) emissions.

Advice for Submittal:

Include a copy of EPA's and CARB's approvals in the application when a special or alternate test procedure and/or special test equipment is used; or,

- Reference the EPA's and/or CARB's approval numbers here, if any.
- List the test fuel specifications for exhaust, permeation, and evaporative (whole vehicle) emissions side-by-side with the required range as specified in the applicable regulations.

(H) Proposed Service Accumulation Procedure (Ref: 40 CFR §86.426-78)

Provide a description of the proposed service accumulation procedure and a description of the proposed scheduled maintenance. Describe how you operated the test prior to testing, including the duty cycle and the minimum testing distance to stabilize the emission levels, number of tests conducted and any scheduled maintenance you performed.

Information to be Included:

If you are not using the Durability Driving Schedule specified in appendix IV of part 86 for service accumulation, you must provide a description of the alternative procedure you plan to use and receive approval in advance by EPA/CARB before you can use it.

Manufacturer's maintenance instructions.

- Deterioration Factor (DF) data type (new, carryover, or carry-across)

- Description of the durability procedure: mileage accumulation procedure, minimum and total testing distance/hours, number of tests conducted, emission levels from each test and any scheduled maintenance performed.

Advice for Submittal:

- Provide the durability procedure descriptions in Part A and place a reference in this section.
- Reference appropriate Section(s) on CSI for deterioration factors and test results.
- If new durability data is not provided, explain the reason and identify the source of data.
- Provide durability data and information in a table format.

(I) Statement of Recommended Periodic and Anticipated Maintenance and Procedures (Ref: 40 CFR §86.426-78)

Provide a statement of recommended periodic and anticipated maintenance and procedures necessary to assure that the vehicles covered by a certificate conform to the regulations.

Information to be Included:

- Listings of the fuels and lubricants to be recommended to the ultimate purchaser.
- A description of the program for training of personnel for such maintenance.
- A description of the equipment required to perform the maintenance.
- Critical emission-related maintenance
- Recommend additional maintenance
- Special maintenance
- Non-critical emission-related maintenance
- Maintenance that is not emission-related
- Emission related part number summary form and sources for parts and repairs

Advice for Submittal:

- Make a table to list all parts that are emission related, with sources for parts and repairs.
- Provide us with the Owner's Manual for the new vehicles/engines when available. Submit the final ones in hardcopy.

(J) Normal Assembly Line Operation and Adjustments

Provide a description of normal assembly line operation and adjustments if such procedures exceed 100 km (62 miles) or three hours of engine operation.

(K) Evaporative/Permeation Emission Controls (Ref: 40 CFR §1051.245)

Provide a description of the evaporative emission controls and applicable test data. (Not required by EPA until MY2008)

Information to be Included:

- Permeation family or group name, if any.
- Evaporative family and group name, if any.
- Fuel tank(s): material, wall thickness, total inside surface area and treatment approach/control technology.
- Fuel lines: material, wall thickness, total inside surface area and control technology.
- Detailed description of any other means or strategies used to prevent permeation emissions.
- Description of crankcase emission control.
- Description of any modifications made to EPA standardized procedure, if any.
- Test data.
- Description of evaporative canister, including vacuum hose routing diagram.

Advice for Submittal:

- You may reference the appropriate CSI sections for the information required above.
- Use schematics to illustrate crankcase, tanks or hoses emissions controls as applicable, and place any common descriptions or schematics in Part A.
- For permeation emission control devices that are used in multiple engine families, you may reference a complete list of breakdown of your permeation emission control devices or strategies in Part A, rather than re-describe them within each application for an individual engine family.
- Provide the durability procedure descriptions in Part A. Then provide a reference in this section.
- Reference the CSI.B6 for all deterioration factors.
- If new durability data is not provided, explain the reason and identify the source of data.

5. Averaging and Banking Requirements (40 CFR §86.449), if Required

You need to provide information requested in this section only if you chose to take corporate emissions averaging, and/or banking options to certify to a manufacturer specified engine Family Emission Limit (FEL) based on 40 CFR §86.449, or CARB designated standards.

CARB regulations allow averaging, but not banking or trading. The use of banked or purchased credits is not allowed in a CARB averaging compliance plan. CARB sales, not 50-state sales, must be used in the CARB averaging compliance plan. A separate CARB compliance plan is required.

Information to be included:

- A statement of your belief that your corporate average emission levels will comply with the applicable standards.
- Detailed calculations of average emission levels and credits balance based on projected production.

Advice for Submittal and record keeping:

- You may reference your statement and a complete breakdown of AB plan for a model year in the Part A for common information and place reference # number here.
- Projected sales may be considered confidential. If you wish confidential treatment of these projected sales, submit an additional CBI copy of your application with the sales figures, and place a reference to the CBI in the public copy.
- You are required to maintain organized paper records containing at least the following for **three years** from the due date for the end-of-model year report:
- Model years and EFs involved.
- Family Emission Limits (FEL)/CARB designated standards.
- Useful life for individual EFs.
- Projected U.S.-directed production volume for the model year.
- Projected California-directed production volume for the model year.
- Actual U.S.-directed production volume for the model year.
- *Actual California-directed production volume for the model year.*
- *You are required to submit detailed calculations of the average emission levels and credits balance based on actual production within 120 days of the end of your model year.*

Additional California Information (Reserved)

Attachments:
Certification Summary Information (data printout form)

On-Highway Motorcycle Certificate Review Sheet - March 7, 2005

☐ Certificate will be issued to: _____ Model Year _____
(Must be a U.S. manufacturer or U.S. importer/distributor)
Engine Family_____ Evaporative Family_____
☐ California Only CARB Executive Order Number_____

Small Volume: ☐ <10,000 Sales;
Small Volume: ☐ <3,000 Sales and < 500 Worldwide Employees of the OEM & their U.S. Importers)
Motorcycle Class: ☐ I-A (0-49cc) ☐ I-B (50-169cc) ☐ II (170-279cc) ☐ III (280cc & up)

Motorcycles are produced by _____ (Identify the OEM)
Motorcycles are produced at _____ (Location of OEM Plant(s)

Models to be listed on Certificate: _____
_____

Comments: _____
_____
_____

1. **New Mfr/Importers only: Send letter to EPA describing your company's plans; request an initial EPA guidance package. Is this the first Certificate issued to your company? ☐ Yes; ☐ No.**

2. **New manufacturers or new U.S. importers of foreign motorcycles must obtain an EPA assigned manufacturer (or importer) codes;** See www.epa.gov/otaq/cfeis.htm.

3. **Group vehicles into engine families;** ref 40CFR 86.420-78, EPA guidance letters CCD-04-01, Feb. 11, 2004, and VPCD-96-12, Dec. 3, 1996; available at http://epa.gov/otaq/cert/dearmfr/dearmfr.htm.

4. **Select test vehicle(s); ref 40 CFR 86.418 to 86.423. Number of test vehicles for this family_____**

5. **Locate a test laboratory capable of performing EPA tests;** ref. www.epa.gov/otaq/consumer/lablist.pdf .
Laboratory where exhaust tests were performed: _____
Laboratory where permeation tests were performed (if applicable): _____

6. **Perform mileage accumulation and exhaust testing.** Ref. 40 CFR 86.426-78 to 86.430-78.
   ☐ Full Mileage accumulation (1/2 of useful life mileage for the class of motorcycle)
   ☐ Requested EPA approval to accumulate 5000 total miles (total annual sales < 300 units)
   ☐ Performed 4 exhaust tests or more; ref. 40 CFR 86.427-78. .
   ☐ 0-50cc: Modified test cycle used. Ungoverned Top speed _____ (must be <36.5mph)

7. **Perform evaporative and/or permeation tests;** Ref. 40 CFR 86.410(g) and 40 CFR 1051, Subpart F.
   ☐ Yes; ☐ No: Performed evaporative testing as required by California regulations
   ☐ Yes; ☐ No: Performed EPA permeation tests of fuel tank and fuel hoses; ref 40 CFR 1051.501 & 515.

8. **EPA Confirmatory Testing:** If selected for confirmatory testing, must provide vehicle to EPA's Ann Arbor, Michigan laboratory or another EPA-designated laboratory; ref 40 CFR 86.434-78.
☐ Tested at EPA laboratory or an EPA-designated laboratory; ☐ Waived by EPA

9. **Submit fee payment & fee filing form;** See CCD-04-14, July 2, 2004; ref www.epa.gov/otaq/fee.htm.
☐ Full Fee Paid: Amount Paid_____;

9. (continued) ☐ **Reduced Fee: Amount Paid_____;**
Number of vehicles paid for_____; Total retail value of all vehicles paid for $_____
☐ **Copy of fee filing form & basis for reduced fees in application. (Do not send a copy of check.)**

10. Application for certification: Submit the completed application to EPA, preferably on CD; ref 40 CFR 86.416-80, 86.438-78, and 86.439-78:

☐ **Application follows EPA's recommended application format;** ref. EPA 3/9/05 workshop
☐ **Application includes electronic & paper copy of CSI (Certification Summary Information)**

The application contains:

☐ A description of the manufacturing and assembly process;
☐ A copy of the agreement between the manufacturer and importer (imported motorcycles only);
☐ Description of vehicles covered by the certificate (vehicle, engine, transmission parameters, etc);
☐ Name and address of the original vehicle manufacturer;
☐ Name and address of the original engine manufacturer;
☐ A detailed description of catalytic converter(s) and emission-related components;
☐ A detailed description of carburetor or fuel injection (manufacturer, model number, etc);
☐ Part numbers of carburetor/fuel injection, catalysts, and emission-related components for all Federal and California models covered by the certificate;
☐ Test data including description of test vehicle(s), emission data & maintenance log;
☐ Email & paper copy of EPA excel files: Engine Family & Test Information Sheets; (not required if CSI provided to EPA)
☐ A statement of compliance as required by 40 CFR 86.437-78(a)(1) or (b)(ii); and
☐ A statement that production motorcycles are identical in all material respects to the motorcycles tested and described in the application for certification.

Emission Control Information Label; ref. 40 CFR 86.413-78:

☐ Actual label or a copy of the actual label is included in the application;
☐ Location where the label will be affixed to motorcycle is included in the application;
☐ Label contains company name & trademark of the certificate holder;
☐ Label contains company name of OEM (EPA recommendation for imported motorcycles)
☐ Label is permanent (can't be peeled off);
☐ Label contains HC+NOx FELs (required if engine family is certified to FELs); and
☐ Label is affixed to motorcycle during production (before going thru U.S. Customs for imports)

Warranty, maintenance instructions, and owner's manuals:

☐ Actual warranty booklet & owners manual provided to EPA; (40 CFR 86.411; 86.412); or
☐ Warranty text & maintenance provided (warranty & owners manuals will be provided later)
☐ Emissions warranty coverage meets minimum Clean Air Act Requirements as follows:

☐ 5 years/ 6,000 km (Class I-A) ☐ 5 years/ 18,000 km (Class II)
☐ 5 years/ 12,000 km (Class I-B) ☐ 5 years/ 30,000 km (Class III)

11. Agreement between importer and a foreign motorcycle manufacturer: The application shall include a letter from the OEM to EPA (on the OEM's letterhead & 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:

☐ **Complete identification of the OEM.** Include all company names, aliases, subsidiary companies, parent companies and subcontractors associated with the manufacturer of motorcycles. Provide a brief history of the OEM, number of years the OEM has been in business, the official OEM website; the number and location 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, ATVs, non-road engines, on-road engines and other products manufactured by the OEM (identified by make, model and engine).

☐ **Identify all entities authorized to import your motorcycles/engines into the U.S.** Provide the number of motorcycles and engines (identified by make, model, engine size, engine type) which are 1) produced annually by OEM; and 2) imported into the U.S. (including models imported by other entities).

☐ **Authorize the applicant to import your products.** Completely identify applicant (importer who will be issued a certificate). Include all company names, aliases, subsidiary companies, parent companies and subcontractors associated with the importation of motorcycles. Provide a brief 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 employees. Provide the name, address, telephone number & email address of key Importer personnel.

☐ **Identify the Importer/Certificate Holder's obligations to the OEM.**

☐ **Identify the OEM's obligations to the Importer/Certificate Holder.**

☐ **Identify the models which the applicant is authorized to import:** Provide a complete list of motorcycle models, engines and other emission-regulated 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.** Provide the name and contact information of a cognizant representative of the manufacturer (normally the importer/certificate holder) who EPA can contact for emission compliance, warranty and other issues. Identify who will be responsible for supplying parts, service, and warranty service to customers. Outline who will be responsible to establish a dealer network, provide service information and provide 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 all emission-related running changes made to production motorcycles & engines.

☐ **EPA only: Agreement was reviewed by: _____**

12. On-Highway Motorcycle Emission Standards; ref. 40 CFR 86.410-90, 86.410-2006:

☐ **Tier 0: 5 g/km HC, 12 g/km CO [1978-2005 model year vehicles]**

☐ **Tier 1 Class I-A, Class I-B and Class II [2006 and later model year vehicles]:**

☐ 1.0 g/km HC, 12.0 g/km CO; or

☐ 1.4 g/km HC+NOx or a FEL of _____g/km HC+NOx; 12.0 g/km CO;

Note: Family Emission Limit (FEL) must be ≤ 5.0 g/km HC+NOx

☐ **Tier 1 Class III [2006-2009; or 2008$^+$ for small volume (<3000 sales and <500 employees)]:**

☐ 1.4 g/km HC+NOx or a FEL of _____g/km HC+NOx; 12.0 g/km CO

Note: Family Emission Limit (FEL) must be ≤ 5.0 g/km HC+NOx

☐ **Tier 2: [Class III only; 2010$^+$ model year vehicles]:**

☐ 0.8 g/km HC+NOx or a FEL of _____g/km HC+NOx; 12.0 g/km CO

Notes: Tier 2 is only applicable to large volume (≥3000 sales and ≥500 employees).
Family Emission Limit (FEL) must be ≤ 2.5 g/km HC+NOx.

☐ **Test vehicle(s) passed all applicable exhaust emission standards**

☐ **Small Volume Hardship Provisions approved (1 year grace period);** ref 86.446-2006, 447-2006

Comments: _____

_____

13. Permeation Standards: [2008$^+$ or 2010$^+$ for small volume (<3000 sales and <500 employees)]:

☐ **Tested to demonstrate compliance with Class I-A, I-B, II, III standards**, ref. 86.1051.245:

Fuel Tank: 1.5 g/m^2/day or _____ g/m^2/day FEL; and

Fuel Hoses: 15 g/m^2/day

☐ **Test vehicle(s) passed all applicable emission standards**

☐ **Certified by Design; ref. 40 CFR 86.1051.245(e):**

Fuel Tank: ☐ Metal Tank with low permeability seals and gaskets; or

☐ Metal Tank with gasket exposed surface area of 1000 mm^2 or less

Fuel Hoses: ☐ All hoses meet Category 1 permeation specifications in SAE J2260

☐ All hoses meet R11-A or R12 permeation specifications in SAE J30

☐ **Small Volume Hardship Provisions approved (1 year grace period);** ref 86.446, 86.447
Comments: _____

14. Additional Requirements if Using FELs:

☐ **HC+NOx Averaging Provisions are used for this engine family;** ref. 40CFR 86.449
- ☐ Application includes Preliminary Corporate Average HC+NOx calculations.
  - Preliminary Class I/II Corporate Average HC+NOx: _____ g/km
    - If projecting a deficit, source of (Class III) offsetting credits: _____
  - Preliminary Class III Corporate Average HC+NOx: _____ g/km
    - If projecting a Tier 2 deficit, source of (early Tier2) offsetting credits: _____
- ☐ Yes or ☐ No: Class III credits will be used in Class I/II Corporate Average.
- ☐ Application includes the statements required by 40CFR 86.449(f)(1) and (h):
  - (f)(1) The corporate average HC+NOx emission level will be below the standard for all classes of motorcycles; and (h) Certifying the accuracy of HC+NOx calculations.
- ☐ Agree to send EPA an end-of-year report within 120 days after model year ends; ref. 86.449.

☐ **HC+NOx Early Tier 2 Banking Provisions are used for this engine family (Class III only)**
- ☐ FEL for this family is less than .8g/km HC+NOx as required by 40 CFR 86.449(j)
- ☐ Assigned a FEL of .8g/km HC+NOx to this family for Tier 1 corporate average calculations

☐ **HC+NOx FELs are being revised for this family before the model year ends**
- ☐ FEL Raised: Must recalculate preliminary average & make new compliance statements.
- ☐ FEL Lowered: Must supply supporting data (e.g. production data from 2-3 vehicles).

☐ **Fuel Tank Permeation Averaging used for this evaporative family;** 86.410(g), 86.1051 SubpartH:
(Fuel tank permeation FELs for evaporative families cannot be revised before the model year ends)
- ☐ Metal tanks are excluded from averaging calculations (as required by 40 CFR 410-2006(g))
- ☐ Application includes Preliminary Corporate Average Permeation calculations.
  - Preliminary Corporate Average fuel tank permeations: _____ $g/m^2/day$
  - If projecting a deficit, source of offsetting credits: _____
    - [Fuel tank deficits are allowed thru 2010, only. Deficits must be eliminated by the end of 2011. ABT not allowed between hwy motorcycles and off-hwy-motorcycles/ATVs; ref 86.449-(g).]
- ☐ Agree to send EPA an end-of-year report within 90 days after the model year ends and a final report within 270 days after model year ends; ref. 1051.730(a).

☐ **Fuel Tank Permeation Early Banking Provisions used for this family**
(Allowed prior to 2008 for large volume mfrs; prior to 2010 for small volume mfrs)
- ☐ FEL for this family is 3.0 $g/m^2/day$ as required by 40 CFR 86.1051.145(g).

Comments: _____

15. Obtain an EPA Certificate of Conformity; ref 40 CFR 86.437-78.
16. Build vehicles to certified specifications (identical to application for certification).
17. Affix emission label to each vehicle produced during the production process per 86.413-78(a)(1).
18. Supply customers with parts, service, owner's manuals, warranty, etc.
19. Send end-of year report to EPA within 120 days after model year ends (if using FELs), per 86.449(g).
20. Submit defect reports, voluntary emission-related recall reports to EPA, ref. 40 CFR 85.1901-1904.

I certify that to the best of my knowledge the above statements are true:

Applicant's Signature: _____ **Date:** _____

EPA: Certificate Reviewed by : _____ Date: _____

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.

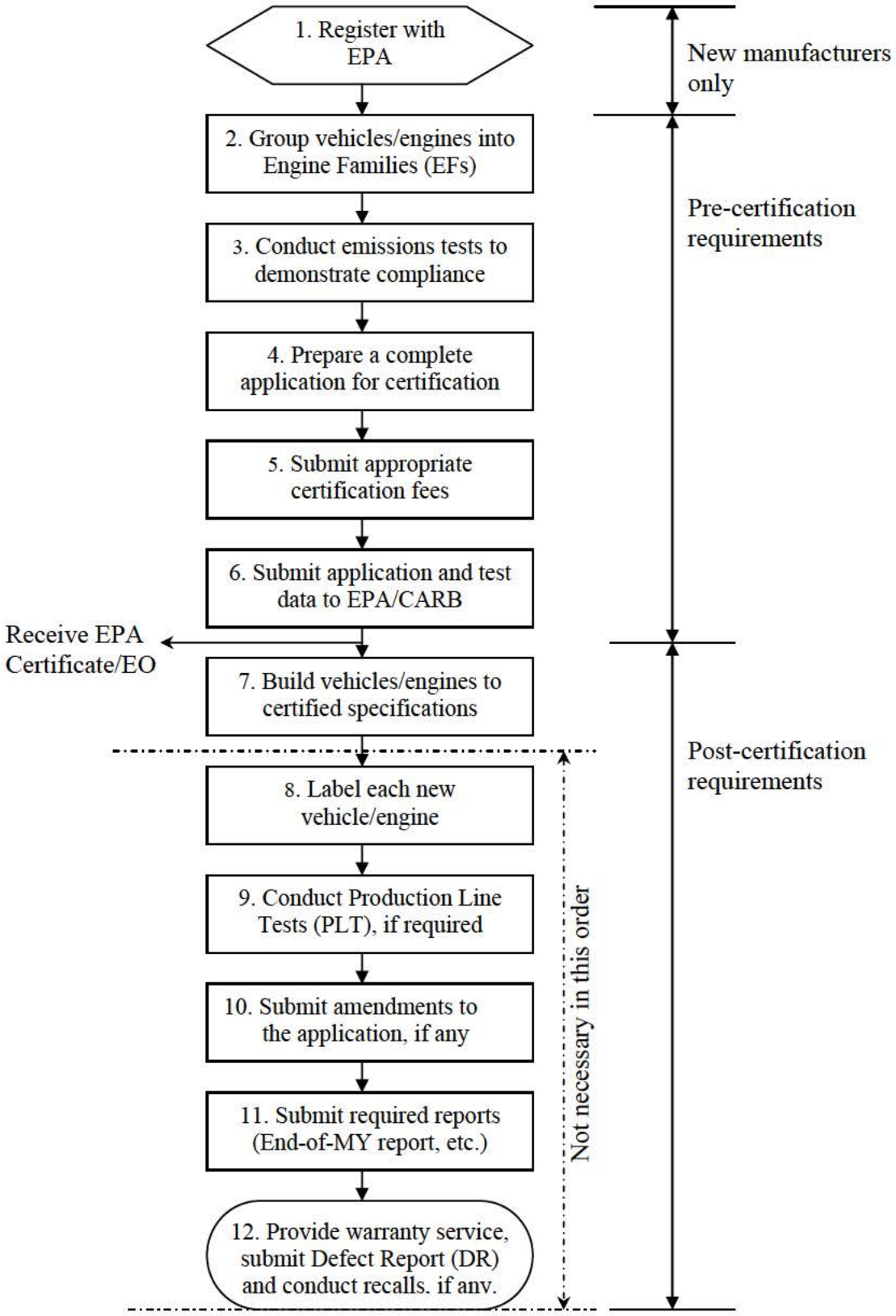
Please note, the citations specified in this draft document reflect the regulations as published on November 8, 2002 and are subject to change through future regulatory amendments.

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



Revision: 7/16/04

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. Under "New Manufacturer Registration" section, download the electronic Manufacturer Code Entry Form, complete it and email it to us at 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 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:

Number of Characters	Column	Description
1	1	**Model Year** (e.g. use "6" if you intend to obtain a 2006 MY certificate)
3	2-4	**Three letter manufacturer identification code** assigned by EPA at the time you register your company with EPA
1	5	**Vehicle Type** (use the letter "X" to represent OFMC and ATVs, including utility vehicles that are covered by applicable ATV regulations).
4	6-9	**Displacement** 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	**Sequence characters specified by a manufacturer**. 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	**(1) 5XYCX0125AE7**: Where: "5"- for 2005 MY engine family, "XYC"-manufacturer, "X"-ATV or OFMC, "0125"- displacement 125 cubic inches, "AE7"-manufacturer specified code. **(2) 6XYCX.072A6B:** 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, NOx, HC and CO_2 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^2/day) for a fuel tank and 15 grams per square meter per day (15 g/m^2/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
1) Application: • A cover letter signed by an authorized representative of your company • Complete content of application for certification • A Fee Payment Form • California E.O., if sales area is "California only"	PDF
2) Data Summary Sheet *	

*** 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.

CARB Package Content	***Format***
1) Application: • *A cover letter with signature* • *Complete content of application for certification* • *EPA certificate for 50 St families certified in CA ** ** can be submitted upon issuance*	*PDF*

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 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. 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.

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, 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 §1051.320	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 §1051.325 & §1051.335	Report within 10 days (§1051.315(g))

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 **electronic** 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 Filling DRs

Rated Power	Component	**Thresholds** (ref: 40 CFR 1068.501(e)& (f))	
		Investigation	**Filling 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)

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.

Recommended Application Format
for
Certification of Off-highway Motorcycles and All-terrain Vehicles

To expedite review of your application for certification, the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) strongly recommend that you adopt the standardized application format presented in this Guidance. While other formats may be acceptable, they may result in longer EPA/CARB review time.

The recommend application format is based on the requirements specified in 40 CFR §1051 (published on November 8, 2002 and are subject to change through future regulatory amendments) and corresponding CARB's Standards and Test Procedures (CaSTP). In this guidance, citations to 40 CFR §1051 shall also mean references to the corresponding CaSTP for the same requirements unless noted otherwise.

Please note that EPA and CARB regulations differ in certain requirements (e.g., definition of ATV, alternate useful life, alternate test schedules, assigned DFs, emission standards and measurement units, etc.) 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 but concurrently*** *addressed to and ruled on by EPA and CARB.*

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July 21, 2004

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

California Air Resources Board

Recommended Application Format

Part A. Common Information
Part B. Individual Engine Family Application

1. Request for Certification
2. Correspondence and Communications
3. Data Summary Sheet (DSS)
4. 40 CFR §1051.205 (a) to (s) Application Requirements
5. Averaging, Banking, and Trading (ABT) Requirements, if any.
6. Additional California Requirements (reserved)

Part A. Common Information (to be submitted with your **first** application for a new model year and must be updated when changes occur before and after certification)

You may submit certain information which is common to more than one engine family (EF) in Part A, rather than in Part B for an individual EF's application. If you do so, you may reference the information rather than submit it within Part B application. We have made suggestions, in each section of Part B below, of information that can usually be submitted as common information.

Part B. Individual Engine Family Application (to be submitted for **each** engine family for a new model year and must be updated when changes occur before and after certification)

1. Request for Certification

The request for an EPA certificate and/or CARB Executive Order (EO) should contain the following information:

- Manufacturer's legal name
- Name of the engine family that you intend to apply for a certificate/EO
- All applicable vehicle categories (see Part B.4(a)) within the EF.
- Statements that the EF complies with all applicable EPA/CARB regulations
- Primary certification contact for questions: name, title, phone and email addresses.
- Signature of an authorized company representative.

Advice for Submittal:

- Organize the above information as a cover letter. *Note: CARB requires an original signed cover letter to be submitted in paper format.*
- Identify your company's primary certification contact by "For questions call..."
- In general, you should plan for at least 30 days for EPA/CARB to review and issue a certificate/Executive Order from the time a complete application is submitted. However, if you have a special need for an expedited review, please indicate in the letter.

2. Correspondence and Communications

Information to be Included:

- Names, titles, phone numbers, fax numbers, e-mail addresses and areas of responsibility of all persons authorized to be in contact with EPA/CARB compliance staff. **At least one U.S. contact must be provided.**
- Dedicated Email address (one per company) for EPA to send certificates and any other official documents.
- U.S. mail address where EPA may mail official document if Email is not appropriate path.
- U.S. mail address where CARB will mail official documents, if different than above.

Advice for Submittal:

- Supply complete list of contacts in Part A.
- Create a dedicated email address to receive your certificate. We strongly recommend that you use the format certificate@[company].com for your company to receive certificates and any other official documents.

3. Data Summary Sheet (DSS)

The Data Summary Sheet (DSS) (See Guidance 2, Attachment 1: DSS) is the printout summary of data that you entered into the EPA/CARB database for this engine family prior to preparing this application (A separate guidance regarding submitting data into EPA/CARB database will be provided when the database is ready). The DSS is comprised of the following sections:

1: General Information
2: EPA/CARB Emission Standards and Certification Levels
3: Engine Family Description
4: Exhaust Emission Control Information
5: Exhaust Emission Data Vehicle and Test Data
6: Permeation Emissions Control and Test Data
7. Models Covered

Including the DSS in the application not only reduces submission of redundant information that is required in other sections of Part B but also provides manufacturer another chance to review the data entered into EPA/CARB database.

[Note: Before the planned EPA/CARB database is fully functional, manufacturers may need to fill out the DSS.]

4. 40 CFR §1051.205 (a) to (s) Application Requirements

(a) Engine Family (EF) Description (Ref: 40 CFR §1051.205(a))

Describe the engine family's specifications and other basic parameters of the vehicle design. List the type of fuel you intend to use to certify the engine family. List vehicle configurations and model names that are included in the engine family.

Information to be included:

- Engine family name
- All applicable EPA/CARB vehicle categories within the EF:
  - **ATV.A** (all-terrain vehicle meeting CARB's 13 CCR 2411 definition and EPA's 40 CFR §1051.801 All-Terrain Vehicle (1) definition);
  - **ATV.B*** (all-terrain vehicle meeting EPA's 40 CFR §1051.801 All-Terrain Vehicle (1) and (2) definition but not CARB's 13 CCR 2411 definition);
  - **OFMC** (off-highway motorcycle);
  - **ENG** (engine-only certification, see 40 CFR §1051.20; not allowed under CARB regulations); or
  - **UTV** (off-road utility vehicles covered by 40 CFR §1051.1 (a)(4))*
- Any new technology applied
- Fuel type(s) (operating fuel(s)): gasoline, liquefied petroleum gas (LPG), methanol, or natural gas (NG), etc.
- The EF's specifications:
  - engine type, combustion cycle, displacement(s), rated power and toque, the number and arrangement of cylinders, appropriate bore diameter, and other basic vehicle parameters
  - engine cooling medium (air, water, oil, etc)
  - fuel system configuration, use SAE J1930 abbreviations:
    - CARB - Carburetion
    - TBI - throttle body fuel injection
    - MFI – multi-port fuel injection
    - SFI - sequential MFI
    - DGI - direct gasoline injection
    - AIR - secondary air injection
    - PAIR - pulsed AIR, etc.
  - method of air aspiration (natural, turbo charge, supercharge, etc.)
- Models covered (commercial model names, not manufacturer's model code names)

Advice for Submittal:

- Reference the appropriate sections on DSS for information required above.
- *Alternatively, manufacturers may choose to provide two tables, one for the models for CARB certification and the other for EPA certification.*

** to be certified under CARB SORE or LSIE regulations*

(b) Emission Control Systems and Auxiliary Emission Control Devices (AECD) (Ref: 40 CFR §1051.205(b))

Explain how the emission-control systems operate:

(1) Describe in detail all the system components for controlling exhaust emissions, including auxiliary emission-control devices and all fuel-system components you will install on any production or test vehicle or engine. Explain why any auxiliary emission-control devices are not defeat devices (see 40 CFR §1051.115(f)). Do not include detailed calibrations for components unless we request them.
(2) Describe the permeation emission controls.

For Exhaust Emission Control:

Information to be Included:

- The detailed description of your catalyst converters (type, number, location, arrangement (i.e., parallel or series)*, volume, compositions, etc)
- The number, location, arrangement (i.e., parallel or series)* and type of the sensors, if any
- Brief description of fuel-system
- Brief description of Exhaust Gas Recirculation (EGR) as applicable
- Brief description of air injection system as applicable
- Brief description of any other exhaust emission control system
- Part numbers of emission related component (part numbers as stamped on the component, not the stock or inventory numbers)

* Use prefix "2" and suffix "(2)" to designate parallel and series arrangements, respectively (e.g.,: 2OC means two oxidizing catalytic converters in a parallel arrangement; O2S(2) means two oxygen sensors in a series arrangement, one before and one after the catalytic converter).

Advice for Submittal:

- You may reference the appropriate sections in the DSS for some information required above.
- You may organize the emission related part data in a table format.
- You may use schematics to illustrate control devices or strategies, if applicable.
- You may place any general descriptions or schematics in Part A.
- If you consider any of the catalyst information (volume, composition or ratio of the precious metals, etc.) to be confidential, create a code, such as "catalyst A" in a public file (name it FOI_[EF name].pdf) of the application and describe the catalyst associated with the code in the confidential copy (with name CBI_[EF name].pdf). Both files must be submitted to EPA/CARB.

For Evaporative/Permeation Emission Controls (Ref: 40 CFR §1051.245)

Information to be Included:

- Permeation family or group name, if any.
- Fuel tank(s): material, wall thickness, total inside surface area and treatment approach/control technology.
- Fuel lines: material, wall thickness, total inside surface area and control technology.
- Detailed description of any other means or strategies used to prevent permeation emissions.

- Description of crankcase emission control.

Advice for Submittal:

- You may reference the appropriate DSS sections for the information required above.
- Use schematics to illustrate crankcase, tanks or hoses emissions controls as applicable, and place any common descriptions or schematics in Part A.
- For permeation emission control devices that are used in multiple engine families, you may reference a complete list of breakdown of your permeation emission control devices or strategies in Part A, rather than re-describe them within each application for an individual engine family.

Auxiliary Emission Control Devices (AECD):

Information to be Included:

All AECDs installed on any applicable vehicles including the sensed and controlled parameters. A detailed justification for each AECD which results in a reduction in effectiveness of the emission control system and rationale why the AECD is not a defeat device as defined under 40 CFR §1051.115(f).

Advice for Submittal:

- You may make a table, such as below, to list all AECDs, sensors, sensed and controlled parameters and justifications involved in the engine family:

AECD	Sensed Parameter	Sensor	Controlled Parameters					Justification/ Rationale
			Volt High	Volt Low				

- You may reference a complete breakdown list of AECD tables for a model year in Part A rather than re-describe them with each engine family.
- If you consider any of the AECD information to be confidential, create a code in the public copy of the application and describe the confidential information associated with the code in the confidential copy. As mentioned above, both copies must be submitted to EPA/CARB.

(c) Emission Data Vehicle/Engine (EDV) Description (Ref: 40 CFR §1051.205(c))

Describe the vehicles or engines you selected for testing to satisfy the certification requirements and the reasons for selecting them.

Information to be Included:

- Manufacturer's explanation for EDV selection (including justifications that the selected EDV meets the selection requirements under both EPA/CARB regulations, e.g. justify why a federal vehicle model selected for EDV for the EF meets CARB requirements; or,

vice versa, why a California vehicle model selected for EDV for the EF meets EPA requirements)
- Data type (new, carryover, or carry across)
- EDV ID (Vehicle Identification Number (VIN) or manufacturer's ID)
- EDV configuration
- EDV model name
- EDV rated horsepower @ rpm and rated toque@rpm
- EDV displacement
- EDV transmission type
- EDV N/V
- EDV curb mass
- EIM
- Road Load (nt)
- Test number
- Test fuel
- Exhaust emission control systems
- Maintenance performed

Advice for Submittal:

- You may place a complete breakdown of your EDV information for a model year in Part A and refer the page number of Part A in this section.
- You may reference the appropriate DSS sections for test vehicle/engine information requested above.

(d) Alternate or Special Test Procedure Description (Ref: 40 CFR §1051.205(d), 235 & 501)

Describe any special or alternate test procedures and/or special test equipment you used.

Please note advanced EPA/CARB approvals are required before taking action.

Information to be Included:

Description of all EPA/CARB-approved special or alternate test procedures, special test equipment, durability procedures or driving schedules you used for exhaust or permeation emission tests.

Advice for Submittal:

- Include a copy of EPA's and CARB's approvals in the application when a special or alternate test procedures and/or special test equipment is used; or,
- Reference the EPA's and/or ARB's approval numbers here, if any.

(e) Durability Test Procedure Description (Ref: 40 CFR §1051.205(e) and 40 CFR §1051.520)

Describe how you operated the test vehicle or engine prior to testing, including the duty cycle and the minimum testing distance or minimum numbers of engine operating hours

to stabilize the emission levels, number of tests conducted and any scheduled maintenance you performed.

Please note, advanced EPA and CARB approvals are required prior to use of any special or alternate test procedures and/or special test equipment.

Exhaust Emissions Durability Procedures (40 CFR §1051.520):

Note: EPA-designated small-volume manufacturers (SVMs) may request to use EPA's assigned deterioration factors (DFs) instead of performing durability tests. California regulations and test procedures require durability demonstration for every EF but, unlike EPA's, do not provide for the use of assigned DFs. SVMs should discuss with assigned CARB staff to obtain advance CARB approval on how CARB's durability requirements will be met before any certification tests are conducted. Failure to do this can significantly delay CARB certification and/or result in a denial of the manufacturer's certification request.

Information to be Included:

- Deterioration Factor (DF) data type (new, carryover, carry-across, or EPA assigned DFs for SVMs)
- If your durability data vehicle (DDV) is different than EDV (in certain carryover or carry-across cases), please provide the same information as required in Part B.4(c) for the DDV.
- Description of the durability procedure: mileage accumulation procedure, minimum and total testing distance/hours, number of tests conducted, emission levels from each test and any scheduled maintenance performed.

Advice for Submittal:

- Provide the durability procedure descriptions in Part A and place a reference in this section.
- Reference appropriate Section(s) on DSS for deterioration factors and test results.
- If new durability data is not provided, explain the reason and identify the source of data.
- Provide durability data and information in a table format.

Permeation Emissions Durability Procedures (40 CFR §1051.515(c)):

Information to be Included:
- Specifications of durability tanks/hoses
- Specifications of a canister(s), if any
- Description of any modifications made to EPA standardized procedure, if any.

Advice for Submittal:
- Provide the durability procedure descriptions in Part A. Then provide a reference in this section.
- Reference the DSS.B6 for all deterioration factors.
- If new durability data is not provided, explain the reason and identify the source of data.

(f) Test Fuel Specifications (Ref: 40 CFR §1051.205(f))

List the specifications of the test fuels to show that they fall within the required ranges

Information to be Included:

- Lists of the test fuel specifications for both exhaust and permeation emissions.

Advice for Submittal:

- List the test fuel specifications for both exhaust and permeation emissions side-by-side with the required range as specified in the applicable regulations.
- Place the above comparison lists in Part A and reference them in this Section.

(g) Useful Life of the Engine Family (Ref: 40 CFR §1051.205(g))

Specify the useful life of the engine family.

For EPA certification, in general the **minimum** useful life is 10,000 kilometers, 5 years, or 1,000 hours, whichever comes first. Five years should be used when the vehicle is not equipped with an odometer or hour meter.

For CARB, the useful life is fixed at 5 years/10,000 km; any other useful life, such as 1000 hours or any other alternative use full life that may be permitted under EPA regulations, is not allowed for California certification. Therefore, vehicle models intended to be certified for California-only or 50 states must comply with CARB useful life requirement.

(h) Maintenance and User Instructions (Ref: 40 CFR §1051.205(h) and 40 CFR §1051.125)

Provide the proposed maintenance and use instructions for the ultimate buyer of each new vehicle of this engine family as specified in 40 CFR §1051.125.

Information to be Included:

- Critical-emission related maintenance
- Recommend additional maintenance
- Special maintenance
- Non-critical-emission related maintenance
- Maintenance that is not emission-related
- Emission related part number summary form and sources for parts and repairs

Advice for Submittal:

- Make a table to list all parts that are emission related, with sources for parts and repairs.
- Provide us with the Owner's Manual for the new vehicles/engines when available. Submit the final ones in hardcopy.

(i) Emission-Related Installation Instructions (Ref: 40 CFR §1051.205(i) and 40 CFR §1051.130)

Information to be Included:

The proposed emission-related installation instructions for each model covered by this application, if you sell engines for someone else to install in a recreational vehicle (see 40 CFR §1051.130).

Advice for Submittal:

- **Discuss with EPA/CARB in advance on any issues raised on emission related installation instructions.**
- You may reference a complete breakdown of emission-related installation instructions for a model year in Part A and place a reference page number here.

(j) Vehicle/ Engine Emission Control Information (VECI) Label (Ref: 40 CFR 1051.205(j))

Propose an emission control information label.

Information to be Included:

- As specified in 40 CFR §1051.135 (c).

Advice for Submittal:

- **Discuss with EPA/CARB in advance if you propose any changes other than specified in 40 CFR §1051.135 (c).**
- Present a photocopy of the VECI label in the **same size** as the actual label.
- You may reference a complete set of photocopies of the labels for a model year in Part A.

(k) Emission Data (Ref: 40 CFR §1051.205(k))

Present emission data to show that you meet emission standards.

Information to be Included:

- Exhaust emission data for HC, NOx, HC+NOx and CO before and after applying deterioration factors, as specified in 40 CFR §1051.205(k)(1).
- Permeation emission test data for HC before and after applying deterioration factors, as specified in 40 CFR §1051.205(k)(2).

Advice for Submittal:

- Reference appropriate DSS section(s) for information requested.
- If new emission data is not provided in certain cases such as existing emission data carry-over, carry-across, or certify by design (Ref. 40 CFR §1051.235 & 245), explain the reason and identify the sources of data.

(l) All Test Results (Ref: 40 CFR §1051.205(l))

Report all test results, including those from invalid tests or from any nonstandard tests (such as measurements based on exhaust concentrations in parts per million). The records of all test results should include a description of test parameters and special test procedures that are applicable to the vehicles/engines covered by the certificate of conformity.

Information to be Included:

- All test results and calculations
- EDV preparation and starting procedures
- Service accumulation and emission stabilizing procedures
- Driving schedule/duty circles
- Shift schedules (list EPA/CARB shift schedule number and shift speeds)
- Dyno loading information (roadload coefficients, as appropriate; indexed by the vehicle characteristics (models, equivalent inertia mass (EIM), etc.)
- Permeation testing parameters
- Special test procedures, if any
- Special test equipment, if any

Advice for Submittal:

- Upon request, submit copies of raw test logs and any other raw records used in certification testing, including testing dates, numbers and distances, raw emissions data and calculations, and a description of all maintenance performed during a test.
- Keep all certification test related records on file for at least 5 model years.

(m) Deterioration Factors (DFs) (Ref: 40 CFR §1051.205(m))

Identify the engine family's deterioration factors and describe how you developed them. Present any emission test data you used for this.

Please note, separate DF calculations and DF(s) for EPA certificate and California EO may be required, due to EPA/CARB regulations differ in the following:
(a) definition of DFs (EPA: additive for without aftertreatment and multiplicative for with aftertreatment; CARB: multiplicative in all cases); and
(b) possible different useful lives (EPA: minimum 10,000 km/1,000 hours/5 years, alternatives may be allowed. CARB: 10000 km in all cases).

Information to be Included:
- List exhaust DFs for HC, NOx, CO.
- List permeation DFs of HC for fuel tanks and fuel hoses separately.
- Provide all emission test data that are used for developing the above DFs.
- Describe how the DFs were developed, if an alternative durability procedure is applied.

Advice for Submittal:

- **Obtain advanced approvals from EPA/CARB for any alternative durability procedure.**
- Reference appropriate DSS section(s) for information required above.
- Provide any general information in Part A.

(n) Adjustable Operating Parameters and Other Adjustments (Ref: 40 CFR §1051.205(n))

Describe all adjustable operating parameters and other adjustments.

Information to be Included (Ref: 40 CFR §1051.115 (c) and (d)):

- The nominal or recommended setting.
- The intended physically adjustable range, including production tolerances if they affect the range.
- The limits or stops used to establish adjustable ranges.
- The air-fuel ratios or jet chart specified in 40 CFR §1051.115(d).

Advice for Submittal:

- Organize the above required information by a table, such as below, when appropriate:

Adjustable Parameters	Nominal Setting	Adjustable Range	Tamper Resistance Method	Approval Reference

- You may reference a complete breakdown of adjustable operating parameters for a model year in the Part A - Common Information and place reference # number here.

(o) Statement of Compliance – Test Vehicles (Ref: 40 CFR §1051.205(o))

State that you operated your test vehicles or engines according to the specified procedures and test parameters using the fuels described in the application to show you meet the requirements of this part. *Separate statements are required referencing EPA and CARB procedures and requirements respectively.*

Advice for Submittal:

- Provide the required compliance statement in your cover letter.

(p) Statement of Compliance – Engine Family (Ref: 40 CFR §1051.205(p))

State unconditionally that all the vehicles (and/or engines) in the engine family comply with the requirements of this part, other referenced parts, and the Clean Air Act. *Separate statements are required referencing EPA and CARB regulations, test procedures and related requirements respectively.*

Advice for Submittal:

- Provide the required compliance statement in your cover letter.

(q) Projected U.S./California Sales (Ref: 40 CFR §1051.205(q))

Include estimates of U.S.-directed production volumes

Information to be Included:

- A list of projected US sales for each model of the engine family.
- Organize the data in a table, such as:

Model Name	U.S Sales Number			Note
	Calif.	49 States	Total	

- Note competition model sales, if included in the FEL.
- Projected sales may be considered confidential. If you wish confidential treatment of these projected sales, submit the sales information only in the CBI copy of your application.

(r) Emission Sampling Method (Ref: 40 CFR §1051.205(r))

Upon request by the EPA/CARB, manufacturers must show us how to modify your production (customer) vehicles to measure emissions in the field (see 40 CFR §1051.115 (b)).

(s) Other Information (40 CFR §1051.205(s))

Information to be Included:

- Phase-in plan for the **first model year** of the phase-in *(Not applicable to CARB.)*
- Copy of your application fee filing form *(Not applicable to CARB.)*
- Copy of a CARB EO, if apply for "California-only" certificate *(Not applicable to CARB.)*
- Any additional information that you may consider to help us to evaluate your application

Advice for Submittal

- Organize the phase-in sales data in such a way to show projected compliance with any applicable implementation schedules or minimum sales requirements. The plan should indicate which EFs are part of the phase-in requirements and which are not. The plan should also include the rate of compliance and a determination that the phase-in implementation schedule will be met.
- Indicate competition vehicle sales involved in the FELs, if any.
- Place the phase-in compliance plan in Part A.
- Projected sales may be considered confidential. If you wish confidential treatment of these projected sales, submit an additional CBI copy of your application with the sales figures, and place a reference to the CBI in the public copy.

5. Averaging, Banking, and Trading Requirements (40 CFR §1051.701-735), if Required

You need to provide information requested in this section only if you chose to take corporate emissions averaging, and/or banking, and/or trading options to certify to a manufacturer specified engine Family Emission Limit (FEL) based on 40 CFR §1051.701-735, or CARB designated standards.

CARB regulations allow averaging, but not banking or trading. The use of banked or purchased credits are not allowed in a CARB averaging compliance plan. CARB sales, not 50-state sales, must be used in the CARB averaging compliance plan. A separate CARB compliance plan is required.

Information to be included:

- A statement of your believe that your corporate average emission levels will comply with the applicable standards.
- Detailed calculations of average emission levels and credits balance based on projected production (see sample format attached).

Advice for Submittal and record keeping:

- You may reference your statement and a complete breakdown of ABT plan for a model year in the Part A for common information and place reference # number here.
- Projected sales may be considered confidential. If you wish confidential treatment of these projected sales, submit an additional CBI copy of your application with the sales figures, and place a reference to the CBI in the public copy.
- You are required to maintain organized paper records containing at least the following for **three years** from the due date for the end-of-model year report:
  - Model years and EFs involved.
  - Family Emission Limits (FEL)/CARB designated standards.
  - Useful life for individual EFs.
  - Projected U.S.-directed production volume for the model year.
  - Projected California-directed production volume for the model year.
  - Actual U.S.-directed production volume for the model year.
  - Actual California-directed production volume for the model year.
- You are required to submit detailed calculations of the average emission levels and credits balance based on actual production within 120 days of the end of your model year.

6. Additional California Information (Reserved)

Attachments:
1. DSS Template
2. Sample of ABT forms
3. Sample Application (to be developed after receiving feedback from manufacturers for this draft)

Draft

ATV/Off-highway Motorcycle Application Checklist (for 2006 and Later MY)

Box with * must be checked to confirm your compliance status **MY:**

US Manufacturer/Importer Name:	Engine Family Name:	Is this the first ever certificate issued to this company? ☐ No ☐ Yes
Is this an ABT engine family? ☐No ☐Yes, ABT plan has been included in: ☐Common Section ☐This application		
Has Common Information been submitted? ☐ No ☐ Yes, a brief list of common information includes:		

*☐ **Test vehicle(s)/engine(s) passed all applicable exhaust emission standards and emission tests and vehicle mileage accumulation were conducted according to:**
- ☐Chassis test procedure specified in 40 CFR 86.426-78 to 86.430-78
- ☐Engine test procedure specified in 40 CFR 1065
- ☐EPA/CARB approved alternative or special testing method, approval reference:
- ☐Carried over from engine family:
- ☐ EPA deterioration factor for small volume manufacturers

☐ **Test vehicle(s)/engine(s) passed all applicable evaporative emission standards and emission tests were conducted according to:**
- ☐ EPA permeation tests of fuel tank and fuel hoses (Ref: 40 CFR 1051.501 & 515)
- ☐ Evaporative testing as required by California regulations
- ☐ EPA/CARB approved method, approval reference:
- ☐ Carried over from evaporative family or group:
- ☐ Certify-by-design (Ref: 40 CFR 1051.501 & 515)

This application contains:

*☐ Phase-in plan (For 2006 MY only)

*☐ California Executive Order (Check for non-"California-only" certificate also)

*☐ Request for certification with (1) unconditional statement of compliance to all requirements specified in 40CFR§1051, 1065 and 1068; and (2) an authorized representative's signature.
- *☐ A statement that vehicles/engines covered by this application meet the appropriate emission standards; When emission averaging is involved, the corporative averaging Emission Levels are meet or less than appropriate standards, no Family Emission Limit (FEL) exceeds appropriate maximum cap limits, and corporate ABT report will be submitted to EPA at the end of model year.
- *☐ A statement that production vehicles/engines are identical in all material respects to the vehicle/engine tested and described in the application for certification.
- *☐ A statement that vehicles/engines covered by this application are built to the certifying specifications.

*☐ Evidence of paid fee and a copy of Application Fee Filing Form (Ref: www.epa.gov/otaq/fee.htm)

*☐ CSI (Certification Summary Information) - both .xml data set and printout summary pages from the data set

*☐ Description of service of process in the U.S. including, but is not limited to, legal arrangement for supplying emission parts, performing warranty service, and conducting emission recalls.

*☐ Required information specified in 40 CFR §1051.205 other than those submitted in CSI data set including, but is not limited to:
- *☐A detailed description of catalytic converter(s) and any emission-related components
- *☐A detailed description of any auxiliary emission control devices (AECD) and a statement of the vehicles/engines covered by this application are free of defeat devices or strategies.
- *☐A List of emission related component numbers (after treatment emission control, fuel system, etc.).
- *☐A copy of actual sized VECI label with a drawing or a photo showing actual label location (Ref: 40 CFR §1051.135(b)&(c)). A statement that VECI labels are fixed on vehicles/engines during manufacturing process.
- *☐A copy of hang-tag for normalized emission rate (NER) (Ref: 40 CFR §1051.135(g))
- *☐Text of warranty statement & maintenance instructions to user
- *☐A list of emission test fuel specifications (Ref: 40 CFR §1051.205(f))
- *☐(Engines only) Emission-related installation instructions (Ref: 40 CFR §1051.205(i) and 40 CFR §1051.130)
- *☐A list of adjustable operating parameters and other adjustments (Ref: 40 CFR §1051.205(n))

I certify that to the best of my knowledge the above statements are true:

Applicant's Signature:_____ **Date: _____**

EPA USE	
Reviewed by:	**Date:**

Version: 3-16-05

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
2565 PLYMOUTH ROAD
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF
AIR AND RADIATION

February 1, 2016

CD-16-02 (HMC-RV)

SUBJECT: Production Report Template for Highway Motorcycles and Recreational Vehicles

Dear Manufacturer:

The purpose of this letter is to announce the availability of the uniform template for reporting annual production. This template will now be applicable for Highway Motorcycles and Recreational Vehicles (ref: 40 CFR 86.415-78(b) and 1051.250). This does not change the applicability of this template for other sectors. The instructions for completing the template are enclosed for the reports due beginning February 15, 2016. The template can be found on the following websites:

www3.epa.gov/otaq/roadbike.htm
www3.epa.gov/otaq/recveh.htm

Please contact your EPA certification representative if you need any assistance.

Sincerely,

Byron J. Bunker, Director
Compliance Division
Office of Transportation and Air Quality

Enclosure

Enclosure 1 to CD-16-02
Instructions Regarding Completion of the Annual Production Report Form

A. How to complete the Form:

If a manufacturer produces both Highway Motorcycles and Recreational Vehicles, separate reports for each industry should be completed and submitted independently. The report(s) should cover all certified engine families of an applicable model year and must include engine families with zero production, if any.

After opening the template:

1. Select the tab named "Submission Template", complete general information fields.
2. Select applicable "INDUSTRY" from the drop-down list at cell D17 for "Hwy Motorcycle (86)" or "Recreational (1051)".
3. Enter the name of each EPA certified Engine Family (EF) in column C, starting in row 22.
4. Enter total MY US production for each EF in column G.
5. Enter MY California production (if applicable) for each EF in column H.
6. If there was no U.S. production for a certified EF, the manufacturer should still list the family and show "0" sales in columns G/H.
7. Manufacturers will not be able to use this Form to report production for "Competition Vehicles".

B. How to submit:

Manufacturers should upload a copy of the completed report into Verify using the "Production Information" document type.

United States Environmental Protection Agency
Office of Enforcement and Compliance Assurance (2201A)
EPA 300 N 06 008

Enforcement Alert

Volume 8, Number 2 | Office of Civil Enforcement | September 2006

EPA Enforcing Stringent Standards for All Nonroad Engines

Agency Assesses $819,000 in Penalties for More Than 55,000 Pieces of Illegal Equipment

Imports are surging, mostly from China, of small engines used in nonroad equipment such as small tractors, lawnmowers, off-road motorcycles and generators. A disturbing portion of these engines are not certified to meet emission standards under the Clean Air Act. The situation is made worse by the dramatic increase in the number of foreign manufacturers of the equipment and the increase in inexperienced U.S. companies and individuals who import it. Illegal equipment is being offered for sale to customers in this country through retail outlets and, increasingly, over the Internet. The U.S. Environmental Protection Agency (EPA) and the U.S. Customs and Border Protection (CBP) have teamed up to intercept this influx of illegal imports at the border.

The Clean Air Act (CAA) prohibits the manufacture or importation of all types of nonroad engines and equipment unless the engines are certified by EPA as meeting emission standards and display the appropriate EPA emissions label. Imported equipment containing nonroad engines that fail to meet all CAA requirements is subject to seizure and export outside of North America. The importer of such illegal equipment or engines will be required to pay a substantial penalty (as much as $32,500 per engine).

EPA is strongly committed to enforcing its nonroad mobile source regulations. In cooperation with CBP, the agency has stepped up interception of illegal imports. EPA has also increased its inspections nationwide at dealerships and of online companies that import and/or sell nonroad equipment. Over a recent ten-month period alone, EPA assessed $819,155 in penalties for the importation of 55,832 pieces of illegal nonroad equipment valued at nearly $13 million.

U.S. Nonroad Engine Requirements

- Engines must be certified by EPA to be in compliance with federal emission standards.
- An EPA emission label must be permanently affixed to each engine and be readily visible.
- EPA Declaration Form 3520-21 must be properly completed for imported engines.

Emissions Impact

Roughly half of the air pollution in the United States is caused by on-road and nonroad engines. These mobile sources of air pollution include cars, trucks and buses, as well as the wide range of gasoline and diesel engines found in nonroad equipment used in construction, agriculture, and lawn and garden equipment, in dirt bikes, and as marine engines. The air pollutants emitted by mobile sources include particulate matter, volatile organic compounds (VOC), air toxics and oxides of nitrogen (NOx). These pollutants cause serious health and environmental problems. They have been linked to many respiratory health problems, such as asthma, heart disease and cancer. Recent CAA emissions standards, in conjunction with advances in combustion technology and fuels, are significantly reducing these emissions. For example, certified engines now emit two to three times fewer emissions than uncertified engines.

For more pollutant information see http://www.epa.gov/otaq/invntory/overview/pollutants/index.htm

Nonroad Regulations

Regulated nonroad mobile sources are a highly diverse group of engines and equipment, ranging from small handheld gasoline engines used in garden equipment to very large locomotive diesel engines, and everything in between. (See Table 1 inside for an overview of these categories.) The regulations set emission limits for each category of nonroad engines and establish testing, certification, labeling, warranty, recall and record-keeping requirements. Some nonroad engine categories have phase-in

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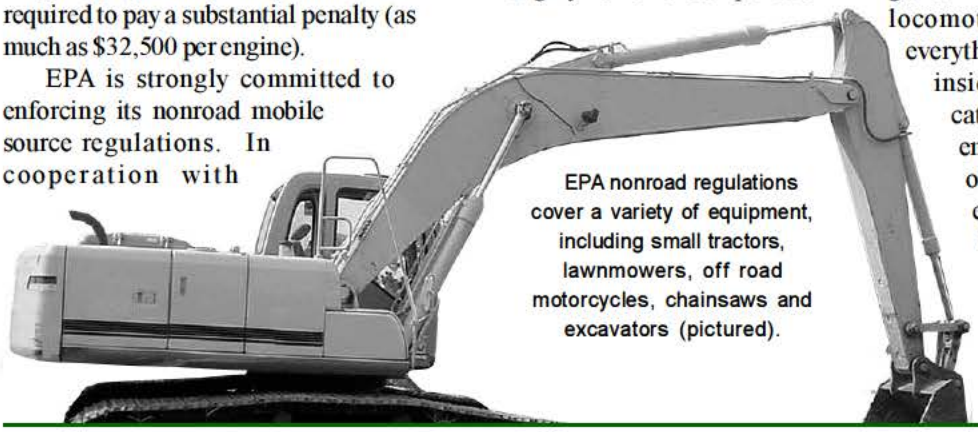

EPA nonroad regulations cover a variety of equipment, including small tractors, lawnmowers, off road motorcycles, chainsaws and excavators (pictured).

provisions and effective dates that vary by engine size. An engine must be certified by EPA that it meets emissions standards and must bear a permanently affixed EPA emissions label before it can be imported into the United States or produced domestically for use in this country. For more information on nonroad engines and the applicable federal regulations please see: http://www.epa.gov/otaq/invntory/overview/examples.htm

Please note that emissions certification requirements also apply to stationary diesel engines, and have been proposed for stationary gasoline engines. For more information, see http://www.epa.gov/ttn/atw/nsps/cinsps/cinspspg.html and http://www.epa.gov/ttn/atw/nsps/sinsps/sinspspg.html

Table 1: Nonroad Engine Regulations

CATEGORY	DESCRIPTION	SIZE	MODEL YEAR*
Locomotive Engines 40 CFR Part 92	Engines built or rebuilt	All	2000
Marine Diesel Engines 40 CFR Part 94	Commercial ships, recreational diesel	≥ 50 Hp	2004
Diesel Engines 40 CFR Parts 89, 1039, 1068	Farm, construction, mining	All	1996
Marine Gas Engines 40 CFR Part 91	Boats (outboard engines) personal watercraft (jet skis)	All All	1998 1999
Recreational Vehicles 40 CFR Parts 1051,1068	Snowmobiles, dirt bikes, all terrain vehicles	All	2006
Small Gas Engines 40 CFR Part 90	lawn mowers, chainsaws, generators, pumps	≤ 25 Hp	1997
Large Gas Engines 40 CFR Parts 1048, 1068	forklifts, generators, mini vehicles	> 25 Hp	2004

* Engines must be certified by EPA to meet emissions standards beginning in the model year

Importer and Manufacturer Responsibility

Both the original engine manufacturer (the company that assembles the engine) and the importer are responsible for ensuring that engines imported to the United States comply with all certification standards and requirements. For example, importers and manufacturers are prohibited from importing or manufacturing engines that are not properly EPA-certified and labeled. EPA highly recommends that importers inspect the engines they intend to import to verify that they are EPA-certified and labeled. Importers are also responsible for ensuring that the engine manufacturer will honor the emissions warranty. (This warranty is separate and apart from any other manufacturer warranty.) Depending on engine type and size, the warranty period may vary from two to five years. The importer also bears responsibility for any requirements not met by the original engine manufacturer. For more information, see: http://epa.gov/otaq/imports

Importer Must Complete EPA Declaration Form

Importers of gasoline and diesel-powered nonroad equipment must demonstrate that the engines comply with all applicable standards and requirements. As part of this process, they must complete EPA Declaration Form 3520-21, which requires confirmation of EPA certification or a description of the applicable exemption. Form 3520-21 must be submitted to CBP upon request along with other CBP entry documents; see 42 U.S.C. § 7601, and 19 C.F.R. § 12.74.

The importer must also present the completed form to EPA officials upon request and retain a copy for five years after importation. Some exemptions require EPA approval before importation. The importer Form 3520-21, with instructions, is available at: http://www.epa.gov/otaq/imports/forms/3520-21.pdf

Emissions Certification Requirements

EPA emissions certification requirements apply to engines manufactured in the United States and to engines that are imported for sale in this

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Mobile generators are among the most common types of nonroad equipment regulated by EPA.

country. Ordinarily, the engine manufacturer, not the importer, obtains EPA certification for imported engines. However, an engine importer also may apply to EPA for a certificate if the importer assumes all the responsibilities of the manufacturer.

For specific citations for each nonroad regulation refer to Table 1. For certification requirements, refer to Table 2.

Enforcement Process When an Importation Violation is Found

When EPA or CBP determines that imported equipment does not meet the EPA emissions certification requirements, CBP detains or seizes the equipment. EPA and CBP then coordinate on enforcement to address the CAA violations, including collection of a penalty and exportation of the illegal equipment. The maximum penalty is $32,500 for each illegal engine, although penalties may be reduced for first-time violators and for importers who voluntarily disclose and remedy the violation and all prior violations. CBP or EPA may also initiate a criminal action against an importer who knowingly makes false or fraudulent statements, or who omits material information required in CBP entry documents. Persons who commit these crimes are subject to a fine of up to $250,000 or imprisonment for up to two years, or both, see 42 U.S.C. § 7413(c) (2).

Don't Let This Happen to You . . .

◆An owner of a business in Florida was sentenced to six months house arrest and two years probation for attempting to smuggle generators with uncertified gasoline and diesel engines into Port Everglades and Miami. The owner forfeited the generators valued at $26,885. For more information on this case, see: http://www.usdoj.gov/usao/fls/PressReleases/060504-01.html

◆A company in Puerto Rico paid a civil penalty of $100,000 for importing more than 2,000 uncertified and unlabeled diesel and gasoline generators. The generators were seized by CBP during September 2005. The company had declared, without proof, that regulated mobile generators were for unregulated stationary use.

◆A company in Ohio paid a civil penalty of $86,000 to EPA and CBP for importing seven uncertified and falsely labeled pieces of nonroad construction equipment with large diesel engines. The company had claimed the equipment was certified.

◆A company in North Carolina paid a civil penalty of $62,000 for importing forty-three uncertified and unlabeled small diesel tractors. Three of the tractors were seized by CBP in Portland, Ore., in January 2006. The company had claimed the tractors were certified.

For more information on Mobile Source Importation Settlements, see: http://cfpub.epa.gov/compliance/civil/programs/caa/importation/

Compliance Assistance

EPA is also committed to providing compliance assistance and outreach to the regulated community so that the public and the environment can be protected from the harmful health effects of emissions from illegal nonroad equipment. For more information, see: http://www.epa.gov/compliance/monitoring/programs/caa/mobile.html and http://www.epa.gov/OTAQ/actions.htm and http://www.epa.gov/otaq/nonroad.htm

>>>

Sample Emission Label for Small Gasoline Engines

Important Engine Information

XYZ Manufacturing, Inc.
This engine is certified to operate on gasoline.
This engine conforms to 2006 U.S. EPA regulations for small nonroad engines.
Emission Compliance Period: 500 hours
Engine Family: 6XYZS: 1451AB
Engine Displacement: 145 cc
Date of Manufacture: 4/2006
Exhaust Emission Control: TWC
Lubricant Requirements: SF 15W-40

Table 2: General Emissions Certification Steps

- Register with EPA
- Conduct emissions testing of prototypes
- Submit certification applications to EPA each year for each engine family in order to obtain an EPA certificate
- Build and label to the certified specifications
- Conduct emissions tests on production vehicles if EPA orders
- Provide warranty information and maintenance instructions to purchasers
- Conduct and pay for emissions warranty repairs
- Submit defect reports and conduct recalls, if necessary

For more certification information, contact the Imports and Certification Hotline: (734) 214-4100 or http://www.epa.gov/otaq/certdata.htm

Policies That Reward Compliance

EPA has two policies that reward companies that bring themselves into compliance with environmental laws. Both EPA's Incentives for Self-Policing, Discovery, Disclosure, Correction and Prevention of Violations (Audit Policy) and its Policy on Compliance Incentives for Small Businesses (Small Business Policy) encourage greater compliance and environmental audits by substantially reducing or eliminating penalties for entities that voluntarily discover, disclose and expeditiously correct violations of environmental law. For more information, see the following websites:
http://www.epa.gov/compliance/incentives/auditing/auditpolicy.html
http://www.epa.gov/compliance/incentives/smallbusiness/index.html

Frequently Asked Questions

Question: Does a missing EPA label on a nonroad diesel or gasoline engine matter?

Answer: Yes. If an engine is not properly labeled, the engine is presumed to be uncertified. Therefore, the importer would not be permitted to import the engine or sell it in the U.S.

Question: May an uncertified engine with similar or even identical emission characteristics as a certified engine be legally imported as "certified?"

Answer: No. Manufacturers may produce uncertified versions of engines that are identical to United States' certified versions as long as the engines are not intended for the U.S. market. These engines are not legal for importation into this country because they are not produced under an EPA-issued certificate, are not properly labeled, do not have the required EPA emissions warranty, and are not subject to EPA audits during manufacturing and potential recall for defects.

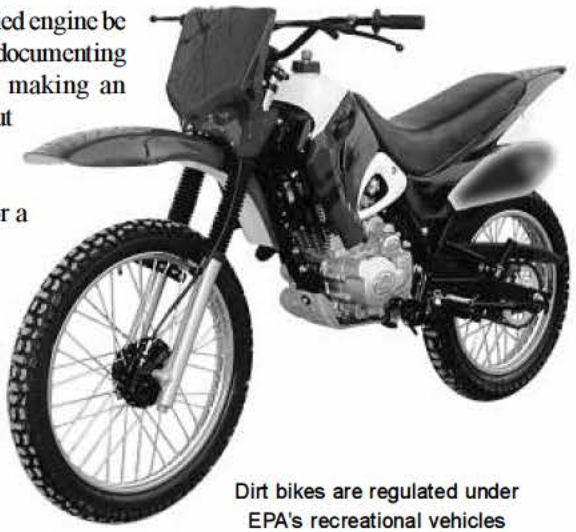
Question: May an uncertified engine be imported for export without documenting that the engine is merely making an intermediate stop and without posting of a bond?

Answer: No. Uncertified engines that are destined for a foreign country must be labeled for export on the engine and the container. An EPA Declaration Form 3520-21 must be completed and an appropriate bond must be paid.

EPA Report Environmental Violations

Report a Violation!

Protecting the environment is everyone's responsibility. Help EPA fight pollution by reporting potential environmental violations.
www.epa.gov/compliance



Dirt bikes are regulated under EPA's recreational vehicles provisions, 40 CFR parts 1051 and 1068.

About Enforcement Alert

Enforcement Alert is published periodically by EPA's Office of Enforcement and Compliance Assurance, Office of Civil Enforce ment, to inform the public and regulated community about environmental enforcement issues, trends and significant enforcement actions. This information should help the regulated community avoid violations of federal environmental law. Please reproduce and share this publication. To receive this newsletter electronically, see www.epa.gov/compliance/resources/newsletters/ civil/enfalert/index.html.

Office of Civil Enforcement: Director, Walker B. Smith

Compliance Assistance Resources

EPA's Air Enforcement Office

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siegler.mark@epa.gov
(202) 564-8673

Anne Wick
wick.anne@epa.gov
(202) 564-2063

EPA's Air Program Office

Imports and Certification Hotline: (734) 214-4100
Imports (Imports@epa.gov)
Fax requests to (732) 214-IMPO (4676)

Important Information:
www.epa.gov/otaq/imports/index.htm

Certification Test Results:
www.epa.gov/otaq/crtest.htm
Nonroad Certification Data:
www.epa.gov/otaq/certdata.htm

Other Resources

CBP (Customs/ Importations)
www.cbp.gov

California Air Resources Board
The State of California has separate emissions certifications requirements for nonroad engines.
General Number (800) 242-4450

Enforcement Alert

Volume 7, Number 3 Office of Civil Enforcement August 2005

Many Scooters and Off-Road Motorcycle Imports Fail to Meet EPA Standards

Surging interest among U.S. consumers in small motor cycles, marketed as scooters and dirt bikes, has manufacturers rushing to fill the demand as quickly and inexpensively as possible. Unfortunately for the environment and many U.S. businesses, some imported vehicles do not meet the emissions standards set by the U.S. government. These substandard products cost far less than their law-abiding counterparts in the competitive U.S. market. Tales of retailers and consumers stuck with sub-standard products, useless warranties and uncertified scooters and motorcycles are becoming too common. This "Enforcement Alert" lays out the U.S. requirements and provides resources to help importers, distributors, and other businesses avoid violations.

The Environmental Protection Agency (EPA), in coordination with U.S. Customs and Border Protection (CBP), is tackling the illegal import problem at the door, with investigations of importers and distributors of scooter-type motorcycles and off-road motorcycles. EPA has discovered many motorcycles being improperly described as off-road vehicles, when the engine size and safety equipment, such as head, tail and brake lights, mean the vehicle may be headed for highway use. Many scooters and motorcycles lack the mandatory EPA emissions certification labels that demonstrate compliance with the Clean Air Act.

EPA and CBP officers are checking motorcycles at ports, warehouses and dealers throughout the United States, measuring engine size, reviewing specifications and looking for EPA certification labels, where necessary. CBP has seized or detained over 3,000 motorcycles from more than thirty importers — twenty-one shipping containers at one port alone. EPA can require importers to export all the illegal motorcycles and pay civil penalties of up to $32,500 for each motorcycle. Since 1978, EPA has required emissions certification for motorcycles, except for those with engines less than 50cc and "off-road" motorcycles that lack head, tail and brake lights. However, beginning in 2006, all motorcycles will be regulated.

An example of the popular gasoline-powered scooter-type motorcycle

Manufacturer Responsibility

Manufacturers of motorcycles are required to provide an emissions warranty to the consumer. The minimum length of the warranty period is five years, or 12,000 to 30,000 km (depending on the size of the engine).

The EPA emissions certification requirement applies to motorcycles manufactured in the United States and to new motorcycles that are imported for sale in this country. EPA certification for imported motorcycles normally is obtained by the motorcycle manufacturer. However, a motorcycle importer also may apply to EPA for a certificate, and thus assume all the responsibilities of the manufacturer.

How to Apply for an Emissions Certification

The motorcycle certification regulations, found at 40 C.F.R. Part 86,

▶▶▶

subpart E., require motorcycle manufacturers (or an importer assuming the responsibility of a manufacturer) to:

- Register with EPA;
- Conduct emissions testing of prototype motorcycles;
- Submit certification applications to EPA each year for each engine family in order to obtain an EPA certificate;
- Build and label motorcycles to the certified specifications;
- Conduct emissions tests on production vehicles if EPA orders;
- Provide warranty information and maintenance instructions to purchasers;
- Conduct and pay for emissions warranty repairs;
- Submit defect reports and conduct recalls, if necessary.

Importer Responsibility

Both the original motorcycle manufacturer (the company that assembles the motorcycle) and the importer are responsible for compliance with the regulations. An importer is prohibited from importing motorcycles that are not properly EPA-certified and labeled unless they are exempt from the certification requirements. Importers should inspect the motorcycles they intend to import to verify that they are either EPA-certified and labeled, or that they qualify for an exemption.

Importers are responsible for ensuring that the motorcycle manufacturer will honor the emissions warranty and comply with all other EPA-required responsibilities.

Sample Emissions Label

IMPORTANT VEHICLE EMISSION CONTROL INFORMATION
XYZ MOTOR CO TAIWAN , LTD XYZ MOTORS
ENGINE FAMILY: 5XYZC.150EFG EVAP FAMILY 5XYZD0009NAA
TUNE UP SPECIFICATIONS AND ADJUSTMENTS (REFER TO YOUR OWNERS MANUAL)

DISPLACEMENT: 150cm³	VALVE LASH (mm) 0.08-0.12
IGNITION TIMING: 10 DEG. BTDC	NO ADJUSTMENT NECESSARY
IDLE SPEED: 1500 RPM IN NEUTRAL	ADJUST STOP SCREW ON CARBURETOR
SPARK PLUG & GAP	NGK CR7D, 0.8-0.9 mm
FUEL: GASOLINE, 87 RON MIN	ENGINE OIL: SAE TYPE SE, 10W30

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 2005 MODEL YEAR MOTORCYCLES

THIS MOTORCYCLE MEETS 1986 AND LATER EPA NOISE REQUIREMENTS OF THE FEDERAL TEST PROCEDURE. MODIFICATIONS WHICH CAUSE THIS MOTORCYCLE TO EXCEED FEDERAL NOISE STANDARDS ARE PROHIBITED BY FEDERAL LAW. SEE OWNERS MANUAL. LIMIT: CLOSING-80dBA/7500RPM MODEL CODE XYZ5YZ0150

Importers should ensure that the motorcycle manufacturer has the necessary communications procedures, repair facilities and personnel, and other infrastructure necessary to conduct warranty repairs in the United States. The warranty repair process should be described in the owner's manual. EPA will hold both the importer and the manufacturer liable for penalties if these requirements are not met.

Import Declaration Form

Importers of motorcycles must complete an EPA Declaration Form 3520-1. On this form, the importer must describe the motorcycles being imported, and either state the motorcycles are EPA-certified and labeled, or describe the exemption that applies to the motorcycles. Form 3520-1 must be submitted to Customs along with other Customs entry documents; (see 42 U.S.C. § 522, 7601, and 19 C.F.R. § 12.73). The importer must also present the completed form to EPA officials upon request and retain a copy for five years after the motorcycles are imported. Some exemptions require EPA approval before importation. Alternative CBP entry

"Pocket motorcycles" are more available than ever.

procedures may apply in the case of motorcycles that are imported by the motorcycle manufacturer. Form 3520-1, along with instructions, is available at: http://www.epa.gov/otaq/imports/index.htm.

When a Violation Is Found

When EPA or CBP determines that imported motorcycles do not meet the EPA emissions certification requirements, CBP detains or seizes the motorcycles. EPA then contacts the importer to address the Clean Air Act violations. The statutory maximum penalty under the Act is $32,500 for each illegal motorcycle, although penalties may be reduced for first-time violators

and for importers who disclose and remedy the violation and all prior violations. CBP or EPA may also initiate a criminal action against an importer who knowingly makes false or fraudulent statements, or who omits material information required in CBP entry documents. Persons who commit these crimes are subject to a fine of up to $250,000 or imprisonment for up to two years, or both. (see 42 U.S.C. 7413(c)(2)).

DOT Requirements

CBP may also detain or seize motorcycles if they do not comply with the U.S. Department of Transportation (DOT) safety and highway requirements:

- DOT defines a motorcycle as a two- or three-wheeled motor vehicle equipped with a seat or saddle. DOT makes no exceptions based on engine displacement.
- All motorcycles that have attributes consistent with on-road use must be manufactured to comply with all applicable Federal Motor Vehicle Safety Standards (FMVSS), and bear DOT compliance labels that are permanently affixed by their original manufacturer.
- The label must identify the manufacturer (actual assembler) of the vehicle, date of manufacture, and state that the vehicle conforms to all applicable FMVSS.
- The civil penalty for any person who sells, offers for sale, introduces or delivers for introduction in interstate commerce, or imports into the United States, any motor vehicle that does not comply with the FMVSS, is up to $5,000 for each violation.

California Requirements

California has separate emissions certification requirements for motorcycles with engines 50cc or larger. Importers should contact the California Air Resources Board to learn more about California motorcycle certification.

Excess Emissions

EPA studies show that motorcycles have much higher emissions than cars. A motorcycle emits as much hydrocarbon in 10 miles as a car driven 850 miles. Uncertified Class I motorcycles may emit three to five times as much hydrocarbon and carbon dioxide as similar certified Class I motorcycles.

These emissions form smog and contain toxic compounds such as benzene.

Summary

Manufacturers must obtain EPA certification for motorcycles or scooters that are sold in the United States unless the motorcycles qualify for an exception. See page 1 for a summary of the requirements for certification, which include emission testing obligations, record-keeping requirements and the need to supply an emissions warranty. Importers must ensure that the motorcycles and scooters they import are EPA-certified and labeled, or qualify for an exception. Importers must complete an EPA Declaration Form 3520-1 for all imported motorcycles, whether certified or not. All motorcycles must meet DOT requirements. Importers and retailers are alerted that all motorcycles will be regulated by EPA beginning in 2006.

"Off-road" motorcycle equipped for on-road use.

Other EPA Policies

EPA has adopted two policies designed to encourage greater compliance with environmental laws and regulations. The "Incentives for Self-Policing, Discovery, Disclosure, Correction and Prevention of Violations" (Audit Policy) and "Policy on Compliance Incentives for Small Businesses" (Small Business Policy) encourage environmental audits by substantially reducing or eliminating penalties for entities that voluntarily discover, disclose and expeditiously correct violations of environmental law. For more information, see the following websites:

www.epa.gov/compliance/resources/policies/incentives/smallbusiness/sbcompplicy.pdf

www.epa.gov/compliance/resources/policies/incentives/auditing/auditpolicy.pdf

United States
Environmental Protection Agency
Office of Regulatory Enforcement
(2241A)
Washington, D.C. 20460
Official Business
Penalty for Private Use $300

About Enforcement Alert

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Address changes: Send email message to: ncepiwo@one net

Document Number: EPA 300-N-05-001

Compliance Assistance Resources

EPA's Air Enforcement Office

Frequently Asked Questions: www.epa.gov/compliance/resources/faqs/civil/mcimports.pdf

Legal: Jocelyn Adair
adair.jocelyn@epa.gov
(202) 564-1011

Technical: Mario Jorquera
jorquera.mario@epa.gov
(202) 564-1079

EPA's Air Program Office

Annual Certification Test Results: www.epa.gov/otaq/crttst htm

New Highway Motorcycle Standards for 2006: www.epa.gov/otaq/roadbike htm

Imports Hotline: (734) 214-4100

Technical: David Good (734) 214-4450

New Off-Road Motorcycle and ATV Standards for 2006: www.epa.gov/otaq/recveh.htm

Motorcycle Certification: www.epa.gov/otaq/cert

Other agencies

CBP (Customs/Importations) www.cbp.gov

U.S. Department of Transportation: www.nhtsa.dot.gov/cars/rules/import

dick merritt@nhtsa.dot.gov

California Air Resources Board: (800) 242-4450

Office of Enforcement and Compliance Assurance (2201A) EPA 325-F-013-001

Enforcement Alert

Volume 11, Number 3 Office of Civil Enforcement May 2013

Manufacturers of Highway Motorcycles and Nonroad Vehicles and Engines Fall Short of Recordkeeping and Reporting Requirements

Purpose

This Enforcement Alert is intended to help those involved with certifying, assembling, importing, distributing, and servicing highway motorcycles and nonroad vehicles and engines understand their recordkeeping and reporting requirements under the Clean Air Act (CAA). It describes who must keep records and make reports, as well as the Environmental Protection Agency's (EPA's) authority to take enforcement actions when companies fail to comply with these requirements.

The emissions standards and compliance and enforcement provisions for highway motorcycles are found in 40 C.F.R. Parts 85 and 86 and 42 U.S.C. §§ 7521-7542. The same provisions for nonroad recreational vehicles and nonroad small gasoline engines are found in 40 C.F.R. Parts 1051, 1054, 1060 and 1068 and 42 U.S.C. § 7547.

Introduction

The CAA requires EPA to promulgate regulations reducing harmful emissions from mobile sources of air pollution, such as vehicles and engines. Pollutants, including carbon monoxide, nitrogen oxides, and hydrocarbons, pose significant health and environmental concerns, and contribute to smog, respiratory illnesses, cancer, and in extreme cases, even death.

To achieve the CAA's goals to protect human health and the environment, EPA administers a vehicle and engine certification program. The program is designed to ensure that every vehicle and engine sold in, or imported into the United States conforms to the design specifications that apply to vehicles or engines that have been demonstrated to meet emission standards and have been approved by EPA.

Proper recordkeeping and reporting facilitates compliance, enables the EPA to assess compliance, and, where necessary, allows the EPA to take an enforcement action to correct violations. Most importantly, recordkeeping and reporting are required by law.

EPA approves vehicles and engines by issuing certificates of conformity (COCs). EPA's decision to issue a COC is based on a review of a detailed COC application, which describes exactly how vehicles or engines are designed, tested, and will be produced under that COC.

Recordkeeping and reporting requirements are critical to the success of this program because they help ensure that vehicle and engine manufacturers are in compliance with the law and that their products are legal to sell in the United States. The CAA and its regulations impose recordkeeping and reporting obligations on a broad range of parties involved with certifying, assembling, importing, distributing, and servicing vehicles, engines, and parts.

Recent EPA investigations have revealed widespread recordkeeping and reporting violations. Many vehicle and engine manufacturers failed to keep and maintain records of emission testing and other information that is necessary to support the applications for their COCs. Companies also neglected to keep records of the vehicle identification numbers and the quantities of vehicles produced under their COCs. Such recordkeeping failures are explicitly prohibited by the CAA and its regulations. Additionally, these recordkeeping failures often mask more serious violations, including the importation and sale of uncertified vehicles or engines. Thus, it is important that the vehicle and engine manufacturing industry understand their recordkeeping and reporting obligations.

Who Must Keep Records and Make Reports

Parties involved in the certification, assembly, or distribution of vehicles and engines must keep records and make reports. Generally, EPA regulations state that "manufacturers," "certificate holders," and sometimes "certifying manufacturers" are responsible for recordkeeping and reporting. These regulations give flexibility to industry participants to choose how to structure their businesses.

These regulations do not, however, allow parties in the

industry to avoid recordkeeping and reporting obligations by virtue of the naming or characterization of their business. The term "manufacturer" is defined broadly in the CAA and its regulations. The term includes not only "any person engaged in the manufacturing or assembling" of vehicles or engines ("assemblers"), but also anyone who imports vehicles or engines or who is "under the control of any such person in connection with the distribution" of vehicles or engines. 42 U.S.C. § 7550(1); 40 C.F.R. §§ 1051.801, 1054.801, 1060.801. Also, the COC applicant must certify in its application—regardless of the applicant's affiliation with the company that assembles the vehicles or engines—that all vehicles or engines intended to be covered by the COC will conform to the description in the COC application and otherwise comply with the law.

EPA is aware that the certification, assembly, and distribution of a vehicle or engine sometimes involves multiple companies with varying degrees of affiliation. Especially in the case where foreign companies assemble vehicles or engines, a second company may hold a COC for the vehicles or engines, and a third company hired by that COC holder may have performed emission testing and prepared and submitted the COC application to EPA, which would enable any number of additional companies to import and distribute the vehicles or engines.

EPA requires that all COC holders, vehicle and engine assemblers, and importers meet the recordkeeping and reporting requirements of the CAA and its regulations.

Although there are many possible business relationships, at a minimum, every company that holds a COC and every company that assembles vehicles or engines covered by that COC is a "manufacturer" when it comes to the recordkeeping and reporting requirements. Therefore, *both* COC holders and assemblers must keep and maintain the required records and any other information relevant to showing compliance. Upon request by EPA, these parties must promptly produce these records and information. In addition, these parties bear the responsibility to ensure that every vehicle or engine that is produced conforms to the design specifications that apply to the vehicle or engine described in the COC application. This requirement demands careful attention by the assembler to ensure that vehicles or engines are manufactured to the certified design, and careful attention by the COC holder to ensure that the certified design is, at a minimum, communicated to the assembler and any changes in production are reported to EPA.

Reliance on an outside consultant does not relieve the COC holder of its obligations; nor does it protect the COC holder from liability under CAA.

Notably, where a COC holder relies on an outside consultant to perform emission testing, prepare and submit COC applications, or communicate with EPA, the COC holder is nevertheless required to keep and maintain all records required by law. Where a consultant refuses to provide a COC holder with this information, EPA considers that consultant to have caused that COC holder to fail in its recordkeeping obligations, and causing violations of the CAA is itself a violation of the law. Thus both the COC holder *and* its consultant can be held liable for the failure of the COC holder to retain the required records.

Finally, a company that imports vehicles and engines (regardless of whether it assembles or certifies them) must also maintain, for at least five years, records sufficient to allow the United States government to determine exactly what vehicles and engines were imported (including, for example, EPA Declaration Forms 3520-1 and 3520-21) and whether the importation was lawful. 19 C.F.R. §§ 141.0, 142.3, 163.4.

Records to Keep and Reports to Make

Highway motorcycle manufacturers must establish, maintain, and retain certain adequately organized and indexed records that are explicitly listed in the EPA regulations. These records include: (1) completed COC applications; (2) identification and description of test vehicles (called emission data vehicles or EDVs); (3) a complete record of all emission tests performed on EDVs including test results; (4) the date of each service accumulation run; (5) a record and description of all maintenance and other servicing performed on the EDV; (6) a record and description of each test performed to diagnose engine or emissions control system performance; and (7) a brief description of any significant events affecting the vehicle during testing. Generally, this data must be kept for six years from the date of issuance of the applicable COC. 40 C.F.R. § 86.440-78.

Types of Nonroad Vehicles and Engines

Similarly, nonroad vehicle and engine manufacturers must keep certain records including: (1) COC applications and accompanying summary information; (2) records specified in 40 C.F.R §§ 1051.205, 1054.205, and 1060.205 that are not included in the COC application; (3) a detailed history of each EDV; (4) production figures for each engine family organized by assembly plant; and (5) vehicle identification numbers for all the vehicles produced under each COC. 40 C.F.R. §§ 1051.250(b), 1054.250(b). Generally, this data must be kept for eight years from the date of issuance of

the applicable COC. 40 C.F.R. §§ 1051.250(c), 1054.250(c), 1060.250(b).

Note that EPA may allow test data to be reused for subsequent model year COCs if the vehicle or engine designs do not change (carry-over of test data). In the case of a carry-over COC, the requirement to maintain the supporting records applies from the date of issuance of the carry-over COC. These records should be written in English, kept organized and readily available so that they can be promptly provided to EPA upon request.

In addition to the records explicitly listed in the regulations, all manufacturers must provide other information that EPA may reasonably require to determine whether the manufacturer has acted, or is acting, in compliance with the CAA and its regulations. 42 U.S.C. § 7542(a). This includes, for example, importation documents and descriptions of a company's business structure and ownership. Where a COC holder is a separate business entity from the company that assembles vehicles or engines under that COC, the CAA authorizes EPA to require both companies to provide, for example, correspondence regarding whether the companies coordinate to ensure that the production vehicles or engines conform to the description in the COC application.

In addition to recordkeeping obligations, manufacturers must report certain information to EPA. For example, manufacturers must investigate and report emission-related defects in vehicle or engine design, materials, or workmanship. 40 C.F.R. §§ 85.1903, 1068.501. Also, motorcycle and nonroad vehicle and engine manufacturers must report total production volumes and production line testing, where such testing is required. 40 C.F.R. §§ 86.414-78(a), 1051.250(a), 1054.250(a), 1051 Subpart D, 1054 Subpart D.

Recordkeeping and reporting obligations concern all stages of the certification, production, and distribution of vehicles and engines

Certification (e.g. Emission Testing)

Production

Distribution (e.g. Shipping)

Consequences of Failing to Keep Records and Make Reports

If a company fails to maintain records or make reports, EPA may void, suspend or revoke its COC, assess civil penalties, require remedial action, or initiate a criminal investigation.

First, in the case of nonroad vehicles and engines, EPA may void a COC upon finding that the COC holder failed to create or maintain the required records. 40 C.F.R. §§ 1051.255(d), 1054.255(d), 1060.255(d). If the COC holder knowingly failed to create required records, EPA may initiate a criminal investigation which could result in criminal penalties pursuant to 42 U.S.C. § 7413(c)(2)(A). Additionally, for nonroad vehicles and engines and highway motorcycles, upon finding that the COC holder knowingly or intentionally submitted false, incomplete, or inaccurate information, EPA may void a COC pursuant to 40 C.F.R §§ 86.442-78(c), 1051.255(e), 1054.255(e), 1060.255(e), and initiate a criminal investigation which could result in criminal penalties pursuant to 42 U.S.C. § 7413(c)(2)(A). A voided COC is considered never to have been granted. Thus, voiding a COC renders all vehicles or engines imported or sold under that COC, whether before or after the voiding, to be uncertified.

Case Example: In April 2013, EPA voided 44 nonroad vehicle COCs and 37 motor vehicle COCs, and in June 2010, EPA voided 12 nonroad vehicle COCs, in part because the COC holders did not maintain the records required by EPA regulations pertaining to vehicle emissions testing.

EPA may also take an enforcement action to assess civil penalties and require remedial action. The CAA and implementing regulations prohibit parties from failing to keep records and make reports, and authorize civil penalties up to $37,500 per day per violation. These penalties also apply to anyone who causes another party to fail to comply with its recordkeeping obligations.

EPA often discovers that a party does not possess the required records when it fails to provide records, or submits incomplete records, in response to an EPA-issued Request for Information authorized by section 208 of the CAA. 42 U.S.C. § 7542. EPA presumes that a party does not have certain records if that party does not provide them in response to EPA's request for them. The egregiousness of recordkeeping and reporting violations increases with the number of missing records, the number of vehicles or engines involved, the risk of unlawful emissions from those vehicles or engines, and the importance of the missing information to documenting vehicle emissions, assessing compliance, and facilitating recalls and other remediation.

Three examples illustrate recent EPA enforcement actions for recordkeeping violations:

- January 2012: EPA settled a case against Loncin (USA), Inc. and Longting USA LLC, who held three COCs that the EPA voided, based, in part, on recordkeeping violations. The company paid a $680,000 penalty to resolve its violations of the CAA and implemented an emissions mitigation project.

- October 2011: The United States filed a civil complaint against MotorScience, Inc., a California-based certification services consulting firm, and its owner, for allegedly failing to create, or refusing to provide, records that its clients were required to keep. The United States also alleges that MotorScience caused the illegal importation of all of the vehicles that were imported under subsequently-voided COCs.

- July 2012: EPA settled a case against Pacific Rim International West Inc., Haili Icebear Inc., and Huzhou Daixi Zhenhua Technology & Trade Co., Ltd. These companies paid a $325,000 penalty. Though they eventually provided EPA with most of the records they were required to keep, EPA took this enforcement action for their failure to do so within a reasonable timeframe.

Conclusion

EPA has broad authority to void COCs, assess civil penalties, initiate a criminal investigation, and seek remedial action where companies fail to keep required records and make required reports. EPA enforces these recordkeeping and reporting requirements to deter violations, maintain a level playing field in the industry, and ensure that EPA's certification program effectively prevents illegal air pollution from vehicles and engines that can be harmful to people's health and the environment.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 16 2009

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Clean Air Act Mobile Source Civil Penalty Policy – Vehicle and Engine Certification Requirements

FROM: Granta Y. Nakayama
Assistant Administrator

TO: Mobile Source Enforcement Personnel

Attached is the final Civil Penalty Policy – Vehicle and Engine Certification Requirements under the Clean Air Act. This policy is intended to be used by EPA in calculating the penalty that the Agency will seek in settlement of civil judicial and administrative enforcement actions for violations of the Vehicle and Engine requirements under Title II of the Act. It will be provided to the public through publication in the Federal Register.

This policy establishes a framework EPA expects to use in exercising its enforcement discretion in determining an appropriate settlement amount for such cases. It is immediately effective, and supersedes the following policies: Tampering and Defeat Device Civil Penalty Policy for Notices of Violations (Feb. 28, 1994); Manufacturers Programs Branch Interim Penalty Policy (Mar. 31, 1993). The policy applies to all civil and administrative actions initiated after this date, and all pending actions in which the government has not yet transmitted a proposed settlement penalty amount. It may be applied in pending cases in which penalty negotiations have commenced, at the discretion of the litigation team.

If you have any questions about this policy, please contact Jacqueline Robles Werner (202-564-1036) in the Air Enforcement Division of the Office of Civil Enforcement.

Attachment

Clean Air Act

Mobile Source Civil Penalty Policy

Title II of the Clean Air Act
Vehicle and Engine Emissions Certification Requirements

U.S. EPA

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CONTENTS

I. Introduction and Applicability

This document sets forth the policy of the U.S. Environmental Protection Agency (EPA) for assessing civil penalties for violations of certain Clean Air Act provisions concerning motor vehicles and motor vehicle engines, and non-road engines and equipment ("Penalty Policy" or "Policy"). This Penalty Policy adheres to the EPA *Policy on Civil Penalties* (EPA General Enforcement Policy #GM-21, February 16, 1984, recodified as PT.1-1), and *A Framework for Statute-Specific Approaches to Penalty Assessments* (EPA General Enforcement Policy #GM-22, February 16, 1984, recodified as PT.1-2) (collectively referred to in this Penalty Policy as the *Policy on Civil Penalties*). Accordingly, the purposes of this Policy are to deter potential violators, to ensure that EPA assesses fair and equitable civil penalties, and to expedite the resolution of claims arising from certain categories of non-compliance with the Act.

This Penalty Policy applies to violations of Title II of the Clean Air Act (Act) – Emission Standards for Moving Sources, 42 U.S.C. §§ 7521 - 7590, and regulations promulgated thereunder, that apply to vehicles and engines.[1] These provisions require that vehicles and engines be certified by EPA to meet emissions standards that are specific to each category and size of vehicle or engine. They also include requirements for record-keeping, emissions labeling, reporting of emission control defects, and warranties of vehicle/engine emission-related components. The Title II provisions also prohibit tampering with, or installing devices to defeat, the emissions controls of a vehicle or engine.

Thus, this Policy applies to violations such as the following:

- The manufacture and sale, or the importation, of uncertified vehicles or engines in violation of Section 203(a)(1) of the Act, 42 U.S.C. § 7522(a)(1);

- The manufacture and sale, or the importation, of vehicles or engines without an appropriate emissions label, in violation of Section 203(a)(4)(A) of the Act, 42 U.S.C. § 7522(a)(4)(A);

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[1] The regulations pertaining to motor vehicles and engines include the following:

Highway vehicles and engines	40 C.F.R. Part 86
Non-road diesel engines	40 C.F.R. Parts 89 and 1039
Small non-road gasoline engines	40 C.F.R. Part 90
Large non-road gasoline engines	40 C.F.R. Part 1048
Marine gasoline engines	40 C.F.R. Part 91
Marine diesel engines	40 C.F.R. Part 94 and 1039
Locomotives	40 C.F.R. Part 92
Recreational vehicles and engines	40 C.F.R. Part 1051
General requirements	40 C.F.R. Part 1068

- The manufacture and sale, or the importation, of vehicles or engines without an appropriate emissions warranty, in violation of Section 203(a)(4)(D) of the Act, 42 U.S.C. § 7522(a)(4)(D);

- Violations of the emission control tampering prohibition under Section 203(a)(3)(A) of the Act, 42 U.S.C. § 7522(a)(3)(A); and

- Violations of the emission control defeat device prohibition under Section 203(a)(3)(B) of the Act, 42 U.S.C. § 7522(a)(3)(B).

Under Section 205(a) of the Act, 42 U.S.C. § 7524(a), the maximum penalty for violations of the vehicle and engine requirements under Title II of the Act is $25,000 per vehicle or engine, with two exceptions. The maximum penalty for violations of the tampering prohibition when committed by any person other than a manufacturer is $2,500 per vehicle, and the maximum penalty for violations of the defeat device prohibition is $2,500 per device. These maximum penalty amounts were increased from $25,000 to $32,500 and from $2,500 to $2,750 for violations occurring after March 15, 2004, through January 12, 2009, and to $37,500 and $3,750 for violations occurring thereafter (*see* Civil Monetary Penalty Inflation Adjustment Rule, 69 Fed. Reg. 7121 (Feb. 13, 2004) and Civil Monetary Penalty Inflation Adjustment Rule, 73 Fed. Reg. 75340 (Dec. 11, 2008)).

Section 205(b) of the Act, 42 U.S.C. § 7524(b) provides the factors that a court should take into account when determining the amount of any penalty in a judicial action under Title II of the Act:

> In determining the amount of any civil penalty to be assessed [in a civil judicial action] the court shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with [Title II of the Act], action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require.

Section 205(c)(2) specifies that these same factors should be taken into account in an administrative penalty assessment for violation of requirements under Title II of the Act.

Section 205(c)(1) of the Act specifies that, in lieu of referring a case to the Department of Justice to commence a civil action in district court, EPA may enforce the violation through an administrative penalty assessment, provided the penalty amount is less than $200,000, unless EPA and the Department of Justice agree that a matter with a larger penalty is appropriate for administrative penalty assessment. This penalty cap on administrative actions was increased to $295,000 under the 2008 Civil Monetary Penalty Inflation Adjustment Rule.

EPA's administrative enforcement of Title II of the Act may result in settlement terms with the violator that are memorialized in informal administrative settlement agreements (ASA), in lieu of commencing a formal administrative action to assess civil penalties or filing a complaint in federal district court. In these informal agreements the violator typically agrees to pay a penalty and to undertake specific remedial actions. If the violator complies with the terms of the ASA, EPA agrees to treat the matter as resolved and to forego initiation of a formal enforcement action. An ASA also specifies that if the violator does not comply with the terms of the ASA, EPA reserves the right to seek enforcement based on the violation or to enforce the terms of the ASA. In addition, EPA reserves the right to enforce violations of the requirements of Title II of the Act through the formal EPA administrative process under 40 C.F.R. Part 22, or through referral to the Department of Justice for filing in federal district court.

Accordingly, this Penalty Policy should be used to calculate settlement amounts for cases that are settled through administrative settlement agreements. This Policy also should be used to calculate the appropriate penalty to assess under the Consolidated Rules of 40 C.F.R. Part 22. However, this Policy is not intended to and does not control the penalty amount requested in judicial actions. It is EPA's policy, in judicial actions, to assert a claim for up to the maximum penalty allowable under the Act. Therefore, after a case has been referred to the Department of Justice, use of this Policy is limited to agreements reached with defendants through negotiated settlements.

The procedures set forth in this document are intended solely for the guidance of government personnel. They are not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States. The Agency reserves the right to act at variance with this Policy and to change it at any time without public notice. This Penalty Policy is effective immediately with respect to all cases in which the first penalty offer has not yet been transmitted to the opposing party.

This Penalty Policy first describes how to calculate the "economic benefit penalty component" and the "gravity penalty component," which, when added together, results in the "preliminary deterrence amount." The Policy then discusses adjustment factors that are applied to the gravity-based component of the penalty or to the preliminary deterrence amount to arrive at an "initial penalty target figure," which is the penalty amount used at the beginning of negotiations with a violator. Finally, the Policy describes the process for any further adjustments to the initial penalty target figure during negotiations with the violator, which results in the penalty amount that is appropriate for resolving the case, called the "adjusted penalty target figure."

II. The Preliminary Deterrence Amount

The *Policy on Civil Penalties* establishes deterrence as an important goal of penalty assessment. More specifically, the *Policy on Civil Penalties* provides that any penalty should, at a minimum, remove any significant economic benefit resulting from noncompliance. In addition, it should include an amount beyond recovery of the economic benefit to reflect the seriousness of the violation. That portion of the penalty which recovers the economic benefit of

noncompliance is referred to as the "economic benefit component;" that part of the penalty which reflects the seriousness of the violation is referred to as the "gravity component." When combined, these two components yield the "preliminary deterrence amount."

This section provides guidelines for calculating both the economic benefit component and the gravity component.

A. The Economic Benefit Component

To ensure that penalties obtained in settlement recover any significant economic benefit of noncompliance,[2] it is necessary to have reliable economic benefit calculation methods. This section sets out guidelines for computing the economic benefit component. It addresses three categories of economic benefit: delayed costs; avoided costs; and the benefit from competitive advantage gained as a result of the violation. This third type of benefit is referred to as "beyond BEN benefit" or "BBB." This section also describes a "rule of thumb" method for calculating the economic benefit resulting from certain types of violations of the mobile source vehicle and engine requirements. The "rule of thumb" described in this Policy should be used by the case team to estimate the economic benefit of noncompliance only when information regarding the actual cost of noncompliance is not available.

1. *Benefit from Delayed Costs*

In many instances, the economic advantage to be derived from noncompliance is the ability to delay making the expenditures necessary to achieve compliance. Delayed costs fall into two categories: capital expenses and one-time non-depreciable costs necessary to achieve compliance with the relevant environmental requirement. Capital expenses are simply things that wear out and need replacement.[3] One time non-depreciable expenses do not involve things that wear out and are thus nonrecurring.[4] A company would achieve an economic benefit by deferring either of these costs until it either decides on its own to comply or until EPA takes an enforcement action.

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[2] The "economic benefit of noncompliance" is sometimes referred to as "BEN."

[3] The distinction between these categories of delayed costs is appropriate because of the different tax treatment they receive and as a consequence, the potential benefit gained by the violator.

[4] In addition, if a one-time outlay is a tax deductible business expense, then the tax benefit from that expense is enjoyed in the year the company makes that expenditure. In contrast, a firm with the depreciable expenditure gets to deduct only a portion of that piece of equipment's cost every year for the applicable depreciation period. In the rare case where they are not deductible (*e.g.*, the purchase of land to site a waste water pretreatment plant) the firm does not enjoy any tax benefit.

Examples of violations that may result in savings from deferred capital expenses are the following:

- Failure to install production-line equipment, or to implement production-line process changes, to ensure that vehicles or engines are manufactured to meet emission standards; or

- Failure to install required monitoring or testing equipment at a factory producing vehicles or engines to ensure that the vehicles or engines will meet emission standards.

Examples of violations that may result in savings from deferred one-time non-depreciable expenses are the following:

- Delayed installation of appropriate emission controls in engines being distributed in commerce;

- Failure to conduct a one-time test in a timely manner; and

- Delay in obtaining certification that an engine meets applicable regulatory standards.

In some circumstances, noncompliance with mobile source vehicle or engine requirements may not result in an economic benefit to the violator from delayed costs. However, to the extent economic benefits from delayed costs are present in mobile source vehicle or engine cases, these costs should be computed using EPA's BEN model.[5]

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[5] EPA has five models for dealing with civil penalty issues:

- BEN – Calculates a violator's economic benefit from delayed or avoided costs;
- ABEL – Evaluates a corporation's or partnership's ability to afford penalties and compliance costs;
- PROJECT – Calculates the actual cost of supplemental environmental projects to violators;
- INDIPAY – Evaluates an individual's ability to afford penalties and compliance costs; and
- MUNIPAY – Evaluates a municipality's ability to afford penalties and compliance costs.

Information about these models is available at: www.epa.gov/compliance/civil/econmodels/index.html.

2. *Benefit from Avoided Costs*

Many types of violations enable a violator to avoid certain costs associated with compliance. Examples of benefits from avoided costs in mobile source vehicle or engine cases include the following:[6]

- Failure to conduct the testing and submit the information necessary to obtain an emissions certificate of conformity for vehicles or engines introduced into commerce or imported by the violator;

- Failure to install pollution control devices on vehicles or engines, which normally result in uncertified vehicles or engines;[7] and

- Importing uncertified, instead of certified, vehicles or engines into the United States.

As discussed below, for settlement purposes a "rule of thumb" approach may be appropriate for calculating the benefit from violations resulting from introducing into commerce or importing uncertified vehicles or engines. When the rule of thumb approach is not appropriate, the economic benefit of avoided costs should be computed using the BEN methodology. However, there are instances where neither the rule of thumb nor the BEN methodology are appropriate for calculating the actual economic benefit of noncompliance. In those instances, the litigation team should develop and use a case-specific method of calculating economic benefit,

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[6] The normal avoided costs BEN addresses are costs that occur annually such as electricity, labor, materials, and insurance premiums. However, most avoided costs in the mobile source program fall into the category of one-time, non-depreciable expenditures that are avoided, not delayed, which requires a specific setting in the BEN model. Those unfamiliar with the BEN model and how to apply it in these situations are urged to contact the Agency's Financial Issues Helpline at (888) 326-6778.

[7] For purposes of this Penalty Policy, a vehicle or engine is considered to be "uncertified" if, for any reason, it is not completely compliant with an EPA emissions certificate of conformity. Vehicles or engines would therefore be considered uncertified in the following circumstances:

- A certificate of conformity for the vehicles or engines was not sought or obtained by the manufacturer or importer; or

- A certificate of conformity was obtained for certain vehicles or engines, but the vehicles or engines were not manufactured in the manner specified in the certificate. For example, a vehicle or engine manufactured without an emission control part specified in the manufacturer's certificate application would be uncertified.

which should be described in the case documents. In developing such an alternative approach, the litigation team is strongly advised to consult with the previously mentioned Financial Issues Helpline at (888) 326-6778.

3. *Beyond BEN Benefit*

A third category of benefit, which is not the result of avoided or delayed costs, reflects the benefits to the violator from business transactions that would not have occurred but for the illegal conduct, and/or the competitive advantage the violator obtained in the marketplace as compared to companies that have complied with the motor vehicle emission control laws and regulations. This benefit category is called "beyond BEN benefit" or "BBB."[8] Mobile source cases where BBB may be present are characterized by vehicles or engines that are attractive to consumers primarily because they offer performance or features not possible with legal vehicles or engines, or because they can be sold at prices not possible with legal vehicles or engines. Similarly, illegal defeat devices and emission control tampering may be attractive to consumers primarily because they result in engine performance not possible with legal engine parts or modifications. Examples of violations that may include BBB are:

- Introducing into commerce or importing uncertified vehicles or engines where the engines have been sold and no recall of the engines is possible;
- Sale of emission control defeat devices; and
- Removing or altering pollution control equipment for a fee (*e.g.*, tampering with mobile source emission control devices).

To adequately remove the economic incentive for violations that include BBB, normally it is appropriate to base the economic benefit penalty component on the net profits made from the improper transactions, *i.e.*, the amount the violator's profits from the sale of uncertified vehicle(s) or engine(s) exceeded the amounts that would have resulted if the party had sold certified vehicle(s) or engine(s), the profits from the sale of illegal device(s), or the profits from tampering.[9]

The BEN methodology is not designed to calculate the economic benefit resulting from BBB. Where this category of benefit is present, the litigation team should use a case-specific method of calculating the economic benefit, which should be described in the case documents.

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[8] BBB was formerly referred to as "illegal competitive advantage" or ICA.

[9] While the net profit would be the normal measure of economic benefit in these situations, the Agency reserves the right to treat the gross proceeds from the sale of the noncompliant product or the total fee charged for tampering as the measure of economic benefit in appropriate cases, or any other measure that is appropriate to the situation.

For assistance in developing a case-specific method, contact the Financial Issues Helpline at (888) 326-6778.

4. *Rule of Thumb Estimate of Economic Benefit*

The economic benefits that result from the sale of uncertified vehicles or engines may have elements of both avoided costs and benefit from BBB. In cases where illegal vehicles or engines are imported but not introduced into commerce, or are introduced into commerce but are recalled, there will only be BEN-type benefit. Consider, for example, a violator that introduces into commerce a piece of equipment containing an engine without a catalytic converter when a catalyst is necessary to meet emission standards. The violator may have avoided the cost of installing the catalytic converter when the engine was manufactured. In the case of imported engines, the importer may have purchased a less expensive engine that was manufactured without a catalyst, thereby avoiding the cost of purchasing a more expensive, fully-compliant engine, for import into the United States. The violator also may have gained a BBB in the marketplace by introducing into commerce or importing an engine that cost less to produce or purchase. Under either analysis, the cost of purchasing and installing the catalytic converter may be used to approximate the violator's economic benefit from the introduction into commerce or importation of the uncertified engine.

In its enforcement of Title II of the Act, EPA has developed a substantial amount of experience in calculating the economic benefit that results from introducing into commerce or importing uncertified vehicles or engines. This experience indicates that it is possible to estimate the benefit through the use of simple formulas. This will be referred to as the "rule of thumb" method in this Penalty Policy.

In particular, the rule of thumb calculates economic benefit in proportion to engine size, which is adjusted to reflect the cost of actions the violator takes to remediate uncertified vehicles or engines. Note that the rule of thumb calculation is generally appropriate for missing emission controls and similar types of violations. While the litigation team may use the rule of thumb model for other types of vehicle and engine violations (*e.g.*, warranty violations), the team should be aware that the model may not represent the best fit for these types of violations, and should attempt to verify the economic benefit estimate.

a. Rule of Thumb Benefit Calculation

Engines regulated under Title II of the Act range in size from very small (*e.g.*, a one horsepower string trimmer) to very large (*e.g.*, marine diesel engines can be 100,000 horsepower or larger), and the cost increment to manufacture a certified engine versus an engine without emission controls is roughly proportional to the engine's size. This is true regardless of the engine type (gasoline or diesel). For purposes of this Policy, the following "rule of thumb" for economic benefit may be used:

- Engines that power cars and light-duty trucks are relatively similar in size (engines in cars range from about 1 to 8 liters), and as a result, for purposes of this rule of

thumb economic benefit for all cars and light-duty trucks is calculated based on an engine size of 250 horsepower.[10]

- The cost of emission controls is also roughly proportional to the engine size, and is estimated to be about $1 per horsepower. As a result, the rule of thumb for calculating the per-engine economic benefit from introducing into commerce or importing an uncertified nonroad engine, recreational vehicle or a heavy-duty highway vehicle is $1 per horsepower.

- For very small engines (*e.g.*, engines under about 15 horsepower), the cost of manufacturing a certified engine is more than $1 per horsepower. As a result, the estimated "rule of thumb" economic benefit should be no smaller than $15 per engine, regardless of the engine's size. If the engine violation at issue is solely a missing or defective emission control label, the "rule of thumb" economic benefit is $5 per engine.

Consider, for example, a hypothetical company, Vehicle/Engine Imports, Inc., that imported five fork lifts powered by uncertified gasoline engines that are 125 horsepower in size, and the engines are uncertified because catalytic converters, required by the applicable emissions certificate of conformity, were not installed. Using the "rule of thumb," the estimated economic benefit to Vehicle/Engine Imports, Inc., for one engine would be 125 x $1 = $125, and the total unadjusted economic benefit for all five engines would be 5 x $125 = $625.

b. Rule of Thumb Adjustment to Reflect Remedial Actions

This Penalty Policy is intended to provide incentives for companies to remedy violations involving uncertified vehicles or engines in order to prevent the actual excess emissions that would result from their use. This remedial action normally takes the form of exporting the uncertified vehicles or engines out of the United States, recalling and repairing them, or, under certain limited circumstances, installing proper emissions labels. In such situations, the cost to the violator of completing these remedial actions can be larger than the economic benefit to the violator from introducing into commerce or importing the uncertified vehicles or engines.

As a result, in the case of vehicles or engines that are the subject of appropriate remediation, the rule of thumb estimate of economic benefit may be reduced or eliminated for these vehicles or engines as part of a settlement that fully remediates the violation. Thus, if a violator remediates some, but not all, of the uncertified vehicles or engines at issue in a case, the economic benefit penalty component should be calculated based on the number of vehicles or

[10] The actual horsepower of highway and off-highway motorcycles should be used, and not the 250 horsepower assumption.

engines for which remedial actions are not completed.[11] Remedial actions may be considered completed if they occur before a final administrative or civil judicial settlement of the case is negotiated, or if the remedial actions are a requirement of the settlement agreement.

However, if the litigation team believes that the cost of remedial actions does not offset the violator's economic benefit in this manner in any particular case, the reduction in the economic benefit component of the penalty to reflect remediation should be modified accordingly. The basis for any such modification should be described in the case documents.

To illustrate this adjustment to the economic benefit, consider once again the example of Vehicle/Engine Imports, Inc., that imported five fork lifts with uncertified engines with an estimated economic benefit was $125 per fork lift. Assume that three of these fork lifts were sold into United States commerce and were not the subject of remediation, but that the importer exported 2 of these fork lifts before they left the port of entry. As a result, the adjusted economic benefit should be calculated based on the three fork lifts that were not the subject of remediation, or 3 x $125 = $375.

c. Situations Where Use of "Rule of Thumb" is Inappropriate

The rule of thumb method only provides a "first-cut estimate" of the economic benefit of avoided compliance. For this reason, use of the rule of thumb method is typically inappropriate for use in situations where a detailed analysis of the economic benefit of noncompliance is needed to support or defend the Agency's position. Accordingly, the rule of thumb method generally should not be used in any of the following circumstances:

- The case team is not confident that the case will settle (or the defendant has not indicated a desire to settle the alleged violations);
- A hearing is likely on the amount of the penalty;
- The defendant identifies economic benefit factors that are unique to the case; or
- The case development team has reason to believe it will produce a substantially inaccurate estimate.

[11] Remediation of violations is relevant to the gravity of violations as well as to economic benefit. As discussed more fully in the gravity portion of this Penalty Policy, uncertified vehicles or engines that are allowed to operate in the United States can result in significant adverse environmental impacts. As a result, the gravity penalty component is larger where the vehicles or engines are not corrected through recall or other appropriate remediation.

5. *Economic Benefit for Violations Other than Uncertified Vehicles or Engines*

The rule of thumb estimate of economic benefit is also intended to apply primarily to cases where uncertified vehicles or engines are introduced into commerce or imported (*i.e.*, where economic benefit is delayed, and/or compliance expenditures are avoided). This rule of thumb may not be appropriate for other types of mobile source violations. For example, cases involving tampering with emission controls or the sale of emission control defeat devices do not fit within the rule of thumb. The rule of thumb also is inappropriate for violations such as failure to report emission control defects or failure to honor emission control warranties.

As a result, in a case involving violations that are not based on uncertified vehicles or engines, the litigation team should develop a method for calculating the economic benefit using the general considerations of delayed cost, avoided cost and benefit from BBB, discussed above. In this circumstance, the method used to calculate economic benefit should be described in the case documents.

B. The Gravity Component

As noted above, the *Policy on Civil Penalties* specifies that for a penalty to achieve deterrence it should, in addition to recovering any economic benefit of noncompliance, recover an additional amount to reflect the seriousness of the violation. Similarly, Sections 205(b) and (c)(2) of the Act specify that penalties for violations of Title II of the Act should take into account the gravity of the violations. This section of the Penalty Policy establishes a method that quantifies the gravity component of the penalty.

The specific objective factors in this Penalty Policy are designed to measure the seriousness of the violation and reflect the considerations described in the *Policy on Civil Penalties*:

- Actual or potential harm. This factor focuses on whether (and to what extent) the activity of the violator actually resulted in, or was likely to result in, the emission of a pollutant in violation of the standards specified for the particular vehicles or engines at issue.

- Importance to the regulatory scheme. This factor focuses on the importance of the requirement to achieving the goals of the Clean Air Act and its implementing regulations.[12]

[12] For example, the mobile source regulations require that vehicles and engines subject to emissions certification standards must be permanently labeled, and that the labels contain certain required emissions and other information. If a manufacturer or importer fails to properly label vehicles or engines, it becomes more difficult for inspectors to determine compliance of this equipment with the emissions certification requirements at the time of import. In addition,

Assigning a dollar figure to represent the gravity of the violations, at its core, involves the consideration of a variety of factors and circumstances. However, linking the dollar amount of the gravity component to objective factors is a useful way of ensuring that violations of approximately equal seriousness are treated similarly.

1. *Actual or Potential Harm*

In the case of violations of the mobile source requirements for vehicles and engines, the actual or potential harm focuses on whether, and to what extent, excess emissions result from the violations. Excess emissions are a function of at least two considerations, and possibly others depending on the facts of the case: (1) the number of violative engines or vehicles; and (2) the amount of excess emissions that will be emitted from each uncertified vehicle or engine over the vehicle's or engine's useful life.

The first consideration can be quantified in a straightforward and objective manner. The number of uncertified vehicles or engines that were imported or introduced into commerce normally is known or is readily ascertainable (*e.g.,* through company records).

However, the second consideration – the amount of excess emissions attributable to the violation(s) – may not be known with certainty, because precise quantification would require emissions testing of the uncertified engines which is time-consuming, resource-intensive, and may not be possible if the subject engines are not in EPA's or the violator's possession. Nevertheless, the potential for excess emissions normally can be estimated in an objective manner based on the following considerations: engine size; emission control devices that are missing or defective; and the effectiveness of actions taken to remedy or mitigate the violation.

a. Engine Size

Similar to the discussion of the economic benefit "rule of thumb" for nonroad engines, recreational vehicles and heavy-duty highway vehicles, above, the amount of emissions from such engines or vehicles is proportional to the engine's size. Thus, the potential for *excess* emissions from a nonroad engine, recreational vehicle or heavy-duty highway vehicle also is proportional to the engine's size. In addition, the size of engines that are the focus of enforcement actions normally is known from commercial documents or importation records. As a result, the gravity penalty component under this Penalty Policy for violations involving uncertified vehicles and engines is calculated to be proportional to the engine size. In the case of automobiles and light-duty trucks, gravity is calculated based upon the assumed engine size of 250 horsepower, as discussed above.

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consumers who may wish to purchase the equipment cannot easily identify certified vehicles or engines if the emissions label is inadequate or missing.

b. Egregiousness

Under this Penalty Policy, the egregiousness of a violation refers to the likelihood that the emissions from the vehicles or engines in violation may exceed certified levels or applicable standards. The most egregiousness category of violations, "Major," applies to violations where excess emissions are likely to occur. For example, engines with missing or defective catalytic converters would be expected to have emissions that are greater than those on which proper catalytic converters had been installed. Most other emission control devices, if missing or defective, also would be expected to result in increased emissions. Also, violations should be classified as "Major" if vehicles or engines are uncertified and there is no information about the emissions from these vehicles or engines, or test data of the uncertified engines shows the engines to exceed emissions standards (however, see the discussion below for violations involving emissions labels).

A lesser egregiousness category, "Moderate," applies to violations involving uncertified vehicles or engines where the emissions from the vehicles or engines are likely to be similar to emissions from certified vehicles or engines. For example, a company may have obtained an emissions certificate from EPA for a particular engine family, but these engines were produced, introduced into commerce, or imported before the date the certificate was issued. Engines produced before the certificate was issued would be uncertified, but the company may be able to show the subject engines are identical to engines produced after the certificate was issued. In this example, the violation would be classified as "Moderate."

Another example of a "Moderate" level of egregiousness would involve vehicles or engines that are properly covered by a certificate of conformity, but the emissions label is missing altogether or the content of the emissions label is sufficiently deficient that the certification status of the vehicle/engine cannot be determined. For example, an emissions label violation should be classified as "Moderate" if information identifying the engine family is missing from the label.

The litigation team should use available information about the vehicles or engines at issue to determine whether a violation should be classified as Major or Moderate. Normally, if there is uncertainty about the proper egregiousness classification, a violation should be classified as Major. The egregiousness category of any particular violation can later be changed, either to a greater or lesser egregiousness category, based on new information. For example, it would be appropriate to reclassify the egregiousness of a violation, from Major to Moderate level, if the violator is able to demonstrate during settlement discussions or in litigation that the vehicles or engines at issue have emissions do not exceed the certification emissions levels under the applicable certificate. However, litigation teams should evaluate the probative value and utility of emissions testing conducted subsequent to initiation of an enforcement action. Such testing, because it may be time-consuming, normally would not be consistent with the swift resolution of an enforcement action. As a result, for purposes of settlement, it may be appropriate to limit the evidence a violator can use to demonstrate the emissions of vehicles or engines to that which is in existence at the time that the violation was committed. An example of a case where this type of preexisting evidence is appropriate is where uncertified imported engines that are initially classified as Major egregiousness because the emissions are unknown. Where the importer

obtains information from the engine manufacturer demonstrating the imported engines are identical to engines manufactured under an EPA emissions certificate, the violation may be reclassified as Moderate. Litigation teams retain the discretion to consider emissions testing conducted in the course of the negotiations where, taking into account relevant facts and circumstances, such information assists in determining the extent of the violation.

A third egregiousness category, "Minor," involves vehicles or engines with emission control labels that are defective, but the certification status of the engine nevertheless can be determined from the label. An example of this type of violation is an emissions label that is attached to the vehicle or engine in a manner that it can be removed without being destroyed or defaced. A vehicle or engine with an emissions label that is defective in this way could have emissions that meet applicable standards. Alternatively, engines or vehicles that are labeled as legal for sale in the United States, but that in fact do not meet applicable emissions and other standards, should be considered a more egregious violation (Moderate or Major, depending on the facts of the particular case).

c. Effectiveness of Actions to Remedy or Mitigate the Violation

In general, penalties should be smaller for violators that take effective steps to promptly remedy any violation upon discovery of the noncompliance. In the context of violations of the vehicle and engine requirements, the resulting excess emissions often depend on whether, and how long, the vehicles or engines are used in the United States. Consider, for example, vehicles that are presented for importation into the United States, but are exported by the importer after the vehicles are identified as being uncertified at the time of importation. In this example, the importer would have violated the prohibition against importing uncertified vehicles when the uncertified vehicles were presented for importation. However, there would be no excess emission in the United States, because the uncertified vehicles are never used in the United States. Thus, in this example, there was the potential for excess emissions but no actual excess emissions occurred because the violative engines were exported. Contrast this example to a case in which uncertified vehicles are introduced into United States commerce and are operated for the vehicles' useful life, resulting in years of actual excess emissions.

Remedial action for uncertified vehicles or engines can occur through several means: they can be exported outside the United States; they can be destroyed; or they can be recalled and repaired.

Therefore, under this Penalty Policy, the gravity penalty component is smaller for uncertified vehicles and engines if appropriate, effective remedial actions are taken promptly. The litigation team has discretion to specify the percentage, up to 30 percent, by which the gravity is increased where remedial action is not taken. A 30 percent increase is used in the case of vehicles or engines for which no remedial action is taken, or where the action is ineffective. Percentages between zero and 30 percent are appropriate where some but not complete remedial actions are taken or where the remedial action was delayed.

2. *Importance to the Regulatory Scheme*

Even in the absence of harm in the form of excess emissions, the gravity component of the penalty should reflect the seriousness of the violation in terms of its effect on the regulatory program. For example, emission control labels are used by EPA and U.S. Customs and Border Protection (CBP) inspectors to identify whether engines or vehicles are certified and legal for sale and distribution in the United States. Noncompliance with the emissions labeling requirements compromises the ability of these inspectors to effectively exclude illegal, uncertified engines from the United States. Accordingly, the importance of the requirement to the regulatory scheme should always be taken into account in determining the egregiousness of the violation.

3. *Scaling Factors*

Violations for which penalties are calculated under this Penalty Policy can involve a very large range in terms of number of engines and in terms of engine sizes. For example, a case may involve a single instance in which one or two uncertified light-duty automobiles are imported, or may involve hundreds of thousands of uncertified cars introduced into commerce by a domestic manufacturer over a longer period of time. Similarly, nonroad engine violations can involve engines that range in size from 1 horsepower to over 100,000 horsepower. If a per-horsepower or per-engine gravity amount is used that results in penalties of an appropriate size for cases involving a small number and/or small size engines, this same per-horsepower or per-engine gravity amount may result in penalties that are inappropriately or unreasonably large, beyond what could reasonably be obtained in court, in cases where the number of uncertified engines and/or engine size is very large. As a result, this Penalty Policy includes scaling factors for both numbers of vehicles or engines, and for engine size in the case of nonroad engines. This scaling results in gravity penalty components that are appropriate for cases that involve a small number of engines and/or small horsepower engines, and for cases that involve a large number of engines and/or large horsepower engines.

4. *Business Size*

Under the *Policy on Civil Penalties,* the first goal of penalty assessment is deterrence. The size of the violator's business is relevant to determining whether the penalty will have a sufficient deterrent effect, and is one of the considerations that Section 205(b) of the Act specifies should be taken into account when calculating a civil penalty.

The amount of the gravity penalty component calculated under this Penalty Policy is intended to be sufficiently large to create an appropriate deterrent for violations committed by small companies. For larger companies, however, a larger penalty is necessary to create an appropriate deterrent. The specific scaling factors for the size of business is set forth in Table 4, below.

5. *Calculating the Gravity Component of a Penalty*

This Penalty Policy uses the gravity considerations and scaling factors described above to calculate gravity penalty components in the following manner.

- Calculate the base per-vehicle/engine gravity, scaled for engine horsepower;
- Adjust to reflect the egregiousness of the violation and the effect of remediation (if any);
- Apply scaling factors for the number of vehicles and/or engines; and
- Adjust to reflect the size of the business.

a. Calculate Base Per-Vehicle or Per-Engine Penalty

The first step is to calculate the base per-vehicle/engine penalty using Table 1 based on the engine size, in horsepower. In the case of automobiles and light-duty trucks, an engine size of 250 horsepower is used regardless of the actual size of the engines in the vehicles in violation.

In the case of violations of the emissions label requirements, the amount of the base per-vehicle/engine penalty is the amount calculated using Table 1 or $500, whichever is smaller (*i.e.*, the base penalty for label violations is capped at $500 per vehicle/engine).

Table 1. Base Per-Engine Penalty Calculation

HP	$ / HP
1 - 10 HP	$80
11 - 100 HP	$20
101 - 1,000 HP	$5
1,001 - 10,000 HP	$1.25
10,000 + HP	$0.31

Use of Table 1. Use Table 1 to calculate a base per-engine penalty by multiplying $80 times the first 10 horsepower of the engine; $20 times the next 90 horsepower; etc., and adding the results together. For example, consider again the example of Vehicle/Engine Imports, Inc., that imported five fork lifts powered by uncertified 125 horsepower engines that were missing the catalytic converter. The base per-engine gravity penalty for one of these engines would be: $80 x 10 = $800; plus $20 x 90 = $1,800; plus $5 x 25 = $125; or a total of $2,725.

b. Adjust the Gravity to Reflect Egregiousness

Adjust the per-vehicle/engine base gravity to reflect the egregiousness of the violation (as discussed above) using the adjustment factors from Table 2.

Table 2. Adjustments to Reflect Egregiousness	
Egregiousness Category	Adjustment Multiplier
Major	6.5
Moderate	3.25
Minor	1

Use of Table 2. Multiply the per-vehicle/engine base gravity times the appropriate adjustment multiplier from Table 2. Consider once again the example of Vehicle/Engine Imports, Inc., that imported five fork lifts with uncertified 125 horsepower engines with missing catalytic converters, where the per-engine gravity was calculated to be $2,725. Based on the discussion above, a missing catalytic converter would be expected to result in excess emissions. As a result, the egregiousness of these violations would be classified as Major. The per-engine gravity adjusted to reflect major egregiousness would be: $2,725 x 6.5 = $17,712.50.

c. Calculate the Multiple Vehicle/Engine Gravity

Use Table 3 to scale the adjusted base per-vehicle/engine penalty to reflect the total number of vehicles or engines in violation.

Table 3. Calculation for the Multiple Vehicle/Engine Gravity.	
Number of Vehicles/Engines	Scaling Factor
1 - 10	1
11 - 100	0.2
101 - 1,000	0.04
1,001 - 10,000	0.008
10,001 - 100,000	0.0016
100,001 +	0.00032

Use of Table 3. Multiply the adjusted base per-engine gravity times 1.0 for the first ten vehicles or engines, and add the adjusted base per-engine gravity times 0.2 for the next 90 vehicles or engines, etc. Consider again the example of Vehicle/Engine Imports, Inc., that imported five fork lifts with 125 horsepower uncertified engines, where the adjusted base per-engine gravity was $17,712.50. The multiple engine gravity would be calculated as follows: 5 x $17,712.50 x 1 = $88,562.50. The average per-engine gravity for this example is still $17,712.50.

In cases involving vehicles or engines with multiple violations, the litigation team has the discretion to use the sum total of all violations for this penalty factor. For example, if the case involves two separate shipments, each with 30 noncompliant engines or vehicles with both label and warranty violations, the penalty could be calculated on the basis of a total of 120 violations.

The litigation team also has the discretion to "group" violations, and re-start the scaling factor in Table 3 for each group. For example, if the case involves five separate shipments, each with 30 noncompliant engines or vehicles, the penalty could be calculated on the basis of each transaction or occurrence giving rise to the violation (*e.g.,* five separate violations of 30 engines each). Depending on the facts of the case, there may be other relevant criteria or bases on which to group the violations (*e.g.,* by model, engine type, period of time, etc.).

d. Calculate the Multiple Vehicle/Engine Gravity For Each Vehicle/Engine Size and/or Egregiousness Categories

A case may include multiple categories of violations representing more than one size vehicle/engine and/or more than one egregiousness category. In this situation, the violation categories should be arranged with the violation category having the largest adjusted base per-vehicle/engine gravity first, and ending with the violation category with the smallest adjusted

base per-vehicle/engine gravity. These gravity amounts should then be scaled for the number of vehicles/engines in violation, using Table 3, in sequence.

For example, consider a case that has three different types of violations, each with a different adjusted per-vehicle/engine gravity amount:

Number of Vehicles/Engines	Adjusted Per-Vehicle/Engine Gravity
15	$5,000
150	$500
3	$8,000

These violations should be arranged in the order of the adjusted base per-vehicle/engine gravity, starting with the largest, so the Table 3 scaling can be calculated in this sequence. This results in a total of ten vehicles/engines in the first Table 3 category, 90 vehicles/engines in the second category, and 68 vehicles in the third category.

Number of Vehicles/Engines	Adjusted Per-Vehicle/Engine Gravity	Number of Vehicles/Engines in Table 3 Category			
		1	2	3	4
3	$8,000	3			
15	$5,000	7	8		
150	$500		82	68	

In this example, the multiple-vehicle gravity for the first violation category (three vehicles/engines; $8,000 adjusted base per-vehicle/engine gravity) should be calculated as: 3 x $8,000 x 1 = $24,000 (an average gravity of $8,000 per vehicle/engine).

The multiple-vehicle gravity for the second violation category (15 vehicles/engines; $5,000 adjusted base per-vehicle gravity) should be calculated as: 7 x $5,000 x 1 = $35,000, plus 8 x $5,000 x 0.2 = $8,000, or a total multiple-vehicle/engine gravity of $43,000 (an average gravity of $2,867 per vehicle/engine).

The multiple-vehicle gravity for the third violation category (150 vehicles/engines; $500 adjusted base per-vehicle/engine gravity) should be calculated as: 82 x $500 x 0.2 = $8,200, plus 68 x $500 x 0.04 = $1,360, or a total multiple-vehicle/engine gravity of $9,560 (an average gravity of $64 per vehicle/engine).

The total multiple-vehicle gravity for all the violations in this example would be the sum of these multiple-vehicle penalties, or $24,000 + $43,000 + $9,560 = $76,560.

As noted in § II(B)(5)(c) above ("Calculate the Multiple Vehicle/Engine Gravity"), the litigation team has the discretion to "group" multiple vehicles or engines where appropriate. If vehicles or engines are "grouped," the calculation for this factor should be consistent with that grouping.

e. Adjust the Gravity to Reflect Remediation

The next step is to increase the multiple vehicle/engine gravity to reflect the lack of remediation if the violations are not corrected through appropriate remedial actions. As discussed above, this adjustment requires the litigation team to specify the number of vehicles or engines that are the subject of remediation, and the percentage by which the penalty increases for vehicles or engines that are not the subject of remediation (up to 30 percent).

To make this adjustment, multiply the average per vehicle/engine gravity (calculated in the previous sections) times the number of vehicles/engines not remediated times the non-remediation percentage increase assigned by the litigation team. The result of this calculation should be added to the multiple-vehicle gravity, calculated in the previous section.

For example, consider once again the example of the five, 125 horsepower fork lifts imported by Vehicle/Engine Inc., with an average per-engine gravity of $17,712.50. Assume that two of these engines were remediated by being exported, and that three were sold into commerce in the United States and, as a consequence, were not remediated. Assume further that the litigation team assigned a non-remediation increase of 30 percent. The incremental penalty amount to reflect non-remediation would be 3 x $17,712.50 x 0.3 = $15,941.25.

The gravity penalty component adjusted for remediation would be: $88,562.50 + $15,941.25 = $104,503.75.

f. Adjust the Gravity Penalty Component to Reflect Business Size

Increase the gravity penalty component to reflect the company's size. This should typically be calculated on the basis of the company's net worth (corporations) or net assets (partnerships or sole propriatorships). There may be instances where business size is more appropriately determined on some other basis (*e.g.*, gross revenues, number of employees, etc.). The basis on which the size of business is determined should be described in the case documents. The amount of these penalty increments are shown in Table 4.

Table 4. Incremental Gravity Penalty Component Amounts Based on Business Size	
Size of the Violator's Business	Incremental Gravity Penalty Component Amount
Under $50,000	None
$50,001 - $100,000	$5,000
$100,001 - $1,000,000	$10,000
$1,000,001 - $5,000,000	$20,000
$5,000,001 - $20,000,000	$35,000
$20,000,001 - $40,000,000	$50,000
$40,000,001 - $70,000,000	$70,000
Above $70,000,000	$70,000 + $25,000 for every additional $30,000,000 or fraction thereof

In the case of a company with more than one facility or location, the size of the violator is determined based on the company's entire operation, and not solely the size of the facility or location at which the violation occurred. With regard to parent and subsidiary operations, only the violative entity should be considered, unless the case team determines that the parent company was involved with or directly oversaw the activities that gave rise to the violation. Where the size of violator component represents over 50% of the penalty component adjusted for remediation (from steps a. through e., above), the litigation team has discretion to reduce the size of violator figure. These thresholds may also be adjusted over time to account for inflation.

Use of Table 4. Once the case team has determined the business size of the violator, it should add the appropriate amount from Table 4 to the gravity penalty component adjusted for remediation. Consider, once again, the example of Vehicle/Engine Imports, Inc., that imported five fork lifts, where the gravity penalty component adjusted for remediation is $104,503.75. Assume this company had a net worth of over $13 million. Using Table 4, an additional $35,000 would be added to the penalty. The final gravity penalty component would therefore be calculated by adding $35,000 + $104,503.75, or $139,503.75.

g. Calculate the Gravity Penalty Component for Violations of the Tampering and Defeat Device Prohibitions

The gravity-calculation approach described above also is appropriate for calculating the gravity penalty component for violations of the tampering prohibition under Section 203(a)(3)(A) of the Act, and of the prohibition against manufacturing, offering for sale, selling or installing emission control defeat devices under Section 203 (a)(3)(B) of the Act.

In the case of tampering violations, the gravity penalty component should be calculated as if the vehicles or engines that were tampered with had been introduced into commerce or imported in the tampered condition. Thus, for example, if a repair shop removed the catalytic converters from a number of automobiles, the gravity would be based on engines of 250 horsepower in size, adjusted to reflect the number of vehicles tampered, egregiousness and remediation, and incremented to reflect business size.

In the case of violations of the defeat device prohibition, the gravity would be based on the vehicles or engines on which the defeat devices are installed or intended to be installed, and calculated as if these vehicles or engines had been introduced into commerce or imported with the defeat device installed. A separate penalty would be assessed for each defeat device manufactured, offered for sale, sold or installed.

h. Calculate the Gravity Penalty Component for Other Violations

The method of calculating the gravity penalty component described in this Penalty Policy is not to apply to cases that involve violations other than uncertified vehicles or engines, or violations of the tampering or defeat device prohibitions. These other types of violations include, for example, emission control defect reporting and emission control warranty violations.

As a result, in a case involving violations that are not based on uncertified vehicles or engines, or the tampering or defeat device prohibitions, the litigation team should develop a method for calculating the gravity penalty component using the general gravity penalty considerations discussed in this Penalty Policy and in the *Policy on Civil Penalties*. In this circumstance, the method used to calculate the gravity penalty component should be described in the case documents.

C. The Preliminary Deterrence Amount

As discussed above, under the *Policy on Civil Penalties* the preliminary deterrence amount is simply the sum of the economic benefit penalty component and the gravity penalty component. Under this Penalty Policy, the preliminary deterrence amount is the sum of the adjusted economic benefit and the fully adjusted gravity component, calculated as described above.

Continuing the example of Vehicle/Engine Importers, Inc., that imported five fork lifts powered by 125 horsepower uncertified engines with missing catalytic converters, the preliminary deterrence amount is the sum of the economic benefit penalty component ($375) and the gravity

penalty component ($139,503.75), or $139,878.75. By comparison, if the same forklifts had been imported by a company with a net worth of $75 million instead of Vehicle/Engine Importers, Inc.'s $13 million, the preliminary deterrence amount would be $199,878.75.

III. The Initial Penalty Target Figure

As discussed above, the *Policy on Civil Penalties* provides that the preliminary deterrence amount is simply the sum of the economic benefit penalty component and the gravity penalty component, each calculated as set forth above. In addition to deterrence, however, another goal of the *Policy on Civil Penalties* is the equitable treatment of the regulated community. This requires that penalty policies must have enough flexibility to account for the unique facts of each case and, at the same time, produce results that are consistent enough to treat similarly-situated violators similarly. This is accomplished by identifying many of the legitimate differences between cases and providing guidelines for how to adjust either the gravity component or the preliminary deterrence amount when those facts occur. The application of these adjustments prior to commencement of negotiation yields the initial penalty target figure. During the course of negotiations, the litigation team may further adjust this figure to yield the adjusted penalty target figure.

Consistent with the *Policy on Civil Penalties*, this section of the Penalty Policy discusses the application of adjustment factors to promote flexibility and to identify management techniques that will promote consistency. These factors are: degree of willfulness and/or negligence; degree of cooperation/non-cooperation; and the violator's history of noncompliance. In addition, the violator's ability to pay, litigation risk or other unique case-specific factors may also bear upon the final penalty. Other than a demonstrated inability to pay or litigation risk, these adjustment factors apply only to the gravity component and not to the economic benefit component. Violators bear the burden of justifying mitigation adjustments they propose based on these factors.

This Penalty Policy specifies the maximum percentage by which the penalty can be adjusted for each factor. The litigation team has discretion to select the adjustment percentage for each factor, within the specified ranges, based on the facts unique to each case, but the rationale for the amount of adjustment should be described in the case documents. Adjustments that are greater than the maximum percentages are possible in the case of unusual or extra-ordinary circumstances, but such larger adjustments must be approved by management of the Air Enforcement Division.

A. Degree of Willfulness and/or Negligence

Although the requirements of Title II of the Act and the implementing regulations are strict liability, this does not render the violator's willfulness and/or negligence irrelevant, and these considerations should be reflected in the gravity-based portion of the penalty.

In assessing the degree of willfulness and/or negligence, all of the following points should be considered in most cases:

- How much control the violator had over the events constituting the violation;
- The foreseeability of the events constituting the violation;
- Whether the violator took reasonable precautions against the events constituting the violation;
- Whether the violator knew or should have known of the possibility violations would occur;
- The level of sophistication within the industry in dealing with compliance issues and the availability of fully compliant vehicles or engines of the type at issue in the case being evaluated; and
- Whether the violator in fact knew of the legal requirement that was violated.

It should be noted that this last point, lack of knowledge of the legal requirement, should never be used as a basis to reduce the gravity-based portion of the penalty. To do so would encourage ignorance of the law. Rather, knowledge of the law should serve only to enhance penalty.

Under this Penalty Policy, the litigation team has discretion to increase or decrease the gravity-based portion of the penalty by up to 20 percent to reflect degree of willfulness and/or negligence. The basis for the level of this adjustment should be described in the case documents.

B. Degree of Cooperation/Non-Cooperation

The degree of cooperation or non-cooperation of the violator in resolving the violation is an appropriate factor to consider in adjusting the gravity-based portion of the penalty. Such adjustments are based on both the goals of equitable treatment and swift resolution of environmental problems.

A threshold indicator of cooperation or non-cooperation is whether the violator promptly reported its noncompliance to EPA. Cooperation can be manifested by the violator promptly reporting its noncompliance. In cases where the litigation team concludes the violator either knew or should have known about the violations, the team then has a basis for evaluating whether and how quickly the violator reported the violations to EPA. Assuming such self-reporting is not required by law or was otherwise not prompted by other governmental action (*i.e.*, the identification and disclosure of the violation was both voluntary and prompt), such behavior should result in the mitigation of the gravity-based portion of the penalty.

Consider, for example, a company that imports vehicles with emissions labels that state the vehicles are required to be equipped with catalytic converters, but catalytic converters are not installed on the vehicles. The importer could know these vehicles are not certified as soon as the importer had custody of the imported vehicles because of the discrepancy between the emissions

labels and the missing catalytic converters; the importer either knew or should have known about the violations at this point. In this example, the gravity-based portion of the penalty should be adjusted, either up or down, based upon how quickly the importer notified EPA of the imported uncertified vehicles after the importer first had custody of them.

There may be other indicia or facts indicating a violator's degree of cooperation other than prompt or delayed reporting of the violation. Under this Penalty Policy, the litigation team has discretion to increase or decrease the gravity-based portion of the penalty by up to 10 percent to reflect prompt reporting of the violation those actions or behavior bearing upon a violator's degree of cooperation. The basis for the level of this adjustment should be described in the case documents.

Note that voluntary actions taken to remedy the violation, such as initiating a recall of defective vehicles prior to conclusion of settlement discussions, are addressed as a separate factor in the initial gravity calculation (*see* § II(B)(2) "Prompt Correction of Violations," above), and should not be considered under this adjustment factor.

C. History of Noncompliance

The *Policy on Civil Penalties* provides that where a party has violated a similar environmental requirement before, this is usually clear evidence that the party was not deterred by the Agency's previous enforcement response. Unless the previous violation was caused by factors entirely out of the control of the violator, this is an indication that the gravity-based portion of the penalty should be adjusted upward.

In deciding how large these adjustments should be, the litigation team should consider the following points:

- How similar the previous violation was (more similar prior violations should result in a larger penalty increase);
- How recent the previous violation was (more recent prior violations should result in a larger penalty increase);
- The number of previous violations (more prior violations should result in a larger penalty increase); and
- The violator's efforts to remedy previous violations(s) (prior violations that were not corrected should result in a larger penalty increase).

A violation generally should be considered "similar" if the Agency's previous enforcement response should have alerted the party to a particular type of compliance problem. For purposes of this Penalty Policy, a "prior violation" includes any act or omission for which a formal enforcement response has occurred, *e.g.*, notice of violation, settlement agreement, warning letter, complaint, consent decree, consent agreement or final order. It also includes any act or omission

for which the violator has previously been given written notification, however informal, that the Agency believes a violation existed.

In the case of violations involving uncertified vehicles or engines, a "similar" violation is one that involves any violation of the vehicle and engine requirements under Title II of the Act or the regulations implementing those requirements.

In the case of a large corporation with many divisions or wholly-owned subsidiaries, it is sometimes difficult to determine whether a previous instance of noncompliance should trigger the adjustment for previous violations. In general, the litigation team should begin with the assumption that if the same parent corporation controlled both the corporate organization with the prior violation and the organization with the current violation, the adjustment for history of noncompliance should apply, unless the violator can demonstrate there was no corporate control or oversight linkage between the two organizations.

Under this Penalty Policy, the litigation team has discretion to increase the gravity-based portion of the penalty up to 35 percent for one prior violation, and up to 70 percent for more than one prior violation. The litigation team should evaluate the considerations discussed above, such as how similar the prior violation was and how long ago it occurred, when determining the percentage that is appropriate in any particular case. The basis for the level of this adjustment should be described in the case documents.

Use of Willfulness/Negligence, Cooperation and History of Noncompliance Factors. This example will again use Vehicle/Engine Importers, Inc.'s importation of five fork lifts with uncertified 125 horsepower engines, in which the gravity penalty component was $139,503.75 and the economic benefit component was $375. Assume the litigation team determined that the following adjustments are appropriate for this case:

- A 10% increase as an aggravating factor, to reflect the degree of the violator's negligence;
- A 5% reduction as a mitigating factor, to reflect the violator's prompt reporting of the violation to EPA and subsequent efforts to expeditiously resolve and address the violation; and
- A 10% increase as an aggravating factor, to reflect the violator's prior history of noncompliance with other Title II requirements.

In this example, there is a net 15% increase of the gravity component of the penalty. Therefore, the $139,503.75 gravity component is increased by $20,925 (0.15 x $139,503.75 = $20,925), for a total gravity penalty of $160,428.75. The $375 economic benefit is added to this amount for a total penalty of $160,803.75.

IV. Ability to Pay

As described in the *Policy on Civil Penalties* and expanded upon in PT.2-1: Guidance on Determining a Violator's Ability to Pay a Civil Penalty (December 16, 1986) (Previously codified as GM 56), the Agency will generally not request penalties that are clearly beyond the means of the violator unless the violations are egregious or the violator refuses to comply on a timely basis. Therefore, under this Penalty Policy, the violator's ability to pay a penalty will be considered in arriving at a specific final penalty amount. At the same time, it is important that the regulated community not see a discount based on inability to pay as EPA sanctioning the efforts of a financially troubled company to gain an unfair competitive advantage by violating the vehicle and engine requirements.

Therefore, EPA reserves the option, in appropriate circumstances, of seeking a penalty that might put a company in severe financial distress. For example, it normally would not be appropriate to reduce a penalty for a company with a long history of previous violations. That long history would demonstrate that less severe measures are ineffective. Similarly, a reduced penalty would not be appropriate if a company's business is viable only if the company is able to continue violating the law. For example, a company found in violation of the defeat device prohibition should not receive a reduced penalty to stay in business if the company intends to continue selling defeat devices.

The financial ability to pay adjustment normally will require a significant amount of financial information specific to the violator. If this information is available prior to commencement of negotiations, it should be assessed as part of the initial penalty target figure. If it is not available pre-negotiation, the litigation team should assess this factor after commencement of negotiations with the violator.

The burden to demonstrate inability to pay, as with the burden of demonstrating the presence of any mitigating circumstances, rests with the violator. If the violator fails to provide sufficient information, then the litigation team should disregard this factor in adjusting the penalty in negotiation.[13]

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[13] Note that under the Environmental Appeals Board (EA.) ruling in *In re: New Waterbury*, 5 E.A.D. 529 (EA. 1994), in administrative enforcement actions for violations under statutes, such as the Clean Air Act, that specify ability to pay as a factor in determining the penalty amount, EPA must prove it adequately considered ability to pay in determining the appropriate penalty. As a result, if a mobile source case is enforced through the formal administrative process, and the defendant is expected to raise its ability to pay as an issue, the litigation team should obtain enough information to demonstrate the defendant's ability to pay was adequately considered when the penalty was calculated. This information can be obtained from the defendant, or from independent sources such as *Dunn and Bradstreet* financial reports on the defendant's business.

When it is determined that a violator cannot afford the penalty prescribed by this Penalty Policy, the following options should be considered:

- Delayed payment schedule: A violator may not have the financial resources necessary to pay the full penalty amount as a one-time payment, but would be able to pay this amount over a period of months or years. However, administration of time-payments is a burden on the Agency, so that this option should be considered only if the Agency is convinced it is not possible for the violator to obtain the funds necessary to pay the full penalty through borrowing money or the sale of assets. If time-payments are used, the violator should pay the largest possible amount of the penalty at the time the case is resolved to reduce the amount of the delayed payments, and the duration of the time-payments should be no longer than is necessary. In any case where time-payments are used, the amount of any delayed payments should be increased to include interest on the delayed payments.

- Straight penalty reductions as a last resort: If this approach is necessary, the reasons for the litigation team's conclusions as to the size of the necessary reduction should be made a part of the case file.

V. Litigation Risk and Other Unique Factors

A case may present other factors that the litigation team believes justify a further increase or reduction of the penalty. For example, a case may have particular strengths or weaknesses that the litigation team believes have not been adequately captured in other areas of this Penalty Policy. For example, if the facts of the case or the nature of the particular regulatory requirement at issue reduce the strength of the Agency's case, this could justify an additional penalty reduction.

Under this Penalty Policy, the litigation team has discretion to increase or decrease the penalty by up to 10 percent to reflect litigation risk or other unique factors. In some cases, such as small-scale imports of small engines, the Preliminary Deterrence Amount generated under this Policy may exceed the value of the goods. In such cases, the litigation team has the discretion to adjust the Preliminary Deterrence Amount accordingly. In other cases, such as those in which the amount of excess emissions is significant, the litigation team has the discretion to increase the penalty to account for the market value of emission offsets. The basis for the level of this adjustment should be described in the case documents. Adjustments greater than 10 percent are possible based upon considerations such as those discussed above, but such larger adjustments must be approved by the Air Enforcement Division Director.

There may be other circumstances in which the facts of a particular case warrants consideration of other factors not specifically identified or discussed in this Penalty Policy, or the adjustment based on listed factors at a percentage or in a manner different than described in this Policy. Such adjustments must also be approved by the Air Enforcement Division Director.

VI. Adjustments to the Initial Penalty Target Figure after Negotiations Have Begun

During the course of settlement negotiations, information often is learned that will cause the litigation team to further reevaluate the facts that led to the particular penalty components and adjustments used to calculate the initial penalty target figure for the case. If so, the penalty should be recalculated to reflect this new information. This new information could affect the following areas:

- Ability to pay (to the extent this was not considered in calculating the initial penalty target figure);
- Adjustments used in calculating the initial penalty target figure; and
- Reassess the preliminary deterrence amount to reflect continued periods of noncompliance not reflected in the original calculation.

The initial penalty target figure, when further adjusted during negotiations based on this new information, yields the adjusted penalty target figure.