EPA Certification Procedure for Battery Powered Electric Highway Motorcycles



United States Environmental Protection Agency

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Complliance and Innovative Strategies Division Office of Transportation and Air Quality U.S. Environmental Protection Agency



EPA-420-B-09-044 December 2009 **EPA Certification Procedure for Battery Powered Electric Highway Motorcycles** (Note: Off-road recreational vehicles powered by battery only do not need EPA certification at this time)

- Step 1: Register with EPA via EPA's website http://epa.gov/otaq/verify/mfr-code.htm to obtain your company's EPA ID and establish Individual User Accounts to access EPA's computer system Verify. After your registration, your company will be assigned to an individual certification contact at EPA for all of your EPA certification issues. Email MC-cert@epa.gov if your have any questions regarding registration.
- Step 2: 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 vehicle emissions certification requirements specified in 40 CFR 86.
- **Step 3:** Group your vehicles to form Engine Families based on your production Model Year, Vehicle Category and Battery Type listed below. 'Engine Family' is the basic unit that EPA uses to identify a group of motorcycles for certification and compliance purpose. A manufacturer should apply for new certificates and pay the appropriate certification fees for each Engine Family that it intends to sell in the U.S.

EPA Vehicle Category Code for Highway Motorcycles:

Code 'C'

Battery Type:

- LION Lithium ion rechargeable battery
- NIMH Nickel Metal Hydride rechargeable battery
- LICO Lithium Cobalt rechargeable battery
- LEAD Lead- Acid rechargeable battery
- NICA Nickel Cadmium rechargeable battery
- LIPO Lithium Polymer rechargeable battery
- LIFE LiFePO4, Lithium iron phosphate rechargeable battery
- ZINC Zinc-air full cell rechargeable battery
- *Note: Please contact EPA* (via e-mail MC-cert@epa.gov) *if you use any other battery types that are not listed above.*

Step 4: Name your Engine Family according to the following EPA Engine Family Naming Convention:

An Engine Family name is a 12 character code that identifies certification model year, certificate holder, vehicle category, battery type, etc. as illustrate below:

Position	1	2	3	4	5	6	7	8	9	10	11	12	
Code	Model Year	EPA 3	Manufacturer's EPA 3 Character ID Code		C (Vehicle Category Code for Highway Motorcycles)		Battery Type Code (See Step 3 above)			Self-d Code	Manufacturer's Self-designated Code for This Engine Family		

Example:

If manufacturer ABC is assigned an EPA ID 'ABC', when applying for an EPA certificate for its 2009 model year battery-only pure electric highway motorcycles that is equipped with a lithium ion rechargeable battery, the name of the Engine Family should be: **9ABCCLIONXXX**, assuming the manufacture uses XXX for its own records to identify this group of motorcycles.

- **Step 5:** Generate and affix a permanent, legible label (ref: § 86.413-2006 Labeling, which has been simplified and adapted below for battery powered electric highway motorcycles) for each certifying vehicle;
- (a)(1) You shall, at the time of manufacture, affix a permanent, legible label, of the type and in the manner described in this step, containing the information provided in this step, to all production models of such vehicles available for sale in the U.S. to the public and covered by an EPA certificate of conformity.
- (2) The permanent, legible label shall be affixed in a readily accessible position. Multi-part labels may be used.
- (3) The label shall be affixed by the vehicle manufacturer who has been issued the certificate of conformity for such vehicle, in such a manner that it cannot be removed without destroying or defacing the label, and shall not be affixed to any part which is easily detached from the vehicle or is likely to be replaced during the useful life of the vehicle.
- (4) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:
 - (i) The label heading shall read: "Vehicle Emission Control Information";
 - (ii) Full corporate name and trademark of the manufacturer;
 - (iii) Engine Family name;
 - (iv) Identification of the exhaust emission control system shall be: 'Battery-only electric vehicle'; and
 - (v) An unconditional statement of conformity: "This Vehicle Conforms to U.S. EPA Air Emissions Regulations Applicable to_XXXX_Model Year New Highway Motorcycles"
- (b) The provisions of § 86.413-2006 shall not prevent a manufacturer from also reciting on the label that such vehicle conforms to any other applicable Federal or State standards for new motorcycles or any other information that such manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the vehicle.

Step 6: Prepare your application for a Certification of Conformity (ref: 40 CFR 86.416-80):

A complete application for a Certification of Conformity for battery-only electric highway motorcycles shall include two files, a PDF text file and an Excel data file:

- **A.** A PDF text file, which should include:
 - 1. A cover letter signed by an authorized representative of the certificate holder and with the unconditional Statement of Compliance as specified 40 CFR 86 437-78(a)(1).
 - 2. An application that shall include the following information as requested and described in the attached EPA temple file E-HMC.xle:
 - a: Certificate holder's information (information about the company and contact person/agent)
 - b: Vehicle specifications and predicted model year sales
 - c: Driving battery pack specifications
 - d: Traction motor specifications
 - 3. A picture(s) of a vehicle(s) covered by the application, a copy of the Vehicle Emissions Control Information (VECI) label for the Engine Family, and picture(s) of the driving battery pack(s).
 - 4. Any other supplementary information that the Agency asks for; or that you would like EPA to know.

B. An Excel data file, which should provide the information required in Step 6A, 2a to 2d above:

Fill out the EPA template data file E-HMC.xle, as attached with this Guidance, to provide the required data to EPA

You should rename both the PDF file and the Excel data file using the Engine Family name. For example, the application for Engine Family 9ABCCLIONXXX should contain the files of 9ABCCLIONXXX.**pdf** and 9ABCCLIONXXX.**xle**.

- **Step 7:** Pay your certification fee to the Agency (Please note, your application review process starts only after your fee has been received by the Agency):
 - Obtain a fee filing form from <u>www.Pay.gov</u> or www.epa.gov/otaq/fees.htm.
 - Fill out the form and file it at <u>www.Pay.gov</u> or by the other methods listed on the form.
 - Pay the appropriate fee for the applicable calendar year as indicated on the form.
- Step 8: Submit your application via Verify, please see detailed instructions on EPA's webpage http://epa.gov/otaq/verify/questions.htm. When asked to identify 'Compliance Document Type' for your submission, you should choose 'Highway Motorcycle: Battery-Powered Compliance Documents' during submission.

Notes:

- Submitting an accurate and completed application is essential for the Agency to review and approve your application.
- You are required to submit the final Model Year sales information at the end of the Model Year. See 40 CFR 86.415-78(b).