September 14, 2015

CD-15-23 (NRSI)

SUBJECT: Catalyst Composition Information You Must Include in Your Certification Applications for Nonroad Small Spark-ignition Engines

Dear Manufacturer:

The purpose of this letter is to advise you regarding the catalyst composition information you must include in your certification applications for Nonroad Small Spark-Ignition (NSRI) engines.

Section 1054.230(b) allows engines to be grouped into one emission family if the engines are the same in a number of respects. Section 1054.230(b)(5) states the engines must have the same “number, location, volume, and composition of catalytic converters.”

For NRSI, the “composition of catalytic converters” includes the substrate material and precious metal content already included in certification applications, as well as the additional information listed on the enclosed document. Production tolerances for these specifications may be included at the applicant’s discretion.

Beginning January 1, 2016, all NRSI engine emission families that utilize catalysts in their emissions configurations must include all of this information in their certification applications. A document containing this additional information must be uploaded into Verify under the document type, “Emission Control Information.” Failure to supply this catalyst composition information with the certification application may result in a delay to the issuance of your Certificate of Conformity.

Any questions regarding this letter can be directed to your EPA certification representative.

Sincerely,

[Signature]

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

Enclosure
A. The following catalytic converter specifications:
   1. Type (honeycomb, grate-type wire mesh, wire knit-type mesh, etc.)
   2. Dimensions, as follows:
      a. Outside dimensions of the container
         i. diameter and length for honeycomb type;
         ii. length, width, and depth of container for mesh type
      b. Inside dimensions of the substrate
         i. diameter and length for honeycomb type – see, for example, Figure 1 below

**Figure 1: Honeycomb Catalytic Converter Dimensional Diagram**

**Example**

3. Cell density for honeycomb type, in cells per square inch or square cm
4. Wire diameter for mesh type – see, for example, Figure 2 below
5. Aperture size for grate-type mesh – see, for example, Figure 2 below
6. Weight of catalyst substrate brick with washcoat and precious metals applied for wire knit-type mesh
7. Precious metal ratio
Figure 2: Mesh Catalytic Converter Dimensional Diagram Example

Wire cloth with square openings is specified by aperture size and wire diameter. The aperture size (w) describes the distance between two neighboring warp or weft wires. The wire diameter is (d).