To: All AEM Member Companies

Date: Thursday, December 27, 2007

Regarding: EPA Tier 4 Flexibility regulations, Summary

Effective January 1st, 2008, US manufacturers will have to comply with Tier 4 regulations on engines with 48 or less horsepower. Additional engine size categories will be subject to more stringent Tier 4 regulations beginning in 2011. AEM has long been involved with engine emissions activities. (Please see AEM’s web page under the “Technical” heading for more Tier 4 information.)

The attached document is intended to provide a brief summary and road map to utilizing the Tier 4 Flexibility provisions of the EPA legislation. It is not intended to be all inclusive and should not be used in lieu of a careful evaluation of the regulation.

**Purpose and notification of intent to use Flex provisions:**
In certain carefully defined circumstances, there are provisions for the use of a limited number of non-Tier 4 compliant, previous Tier engines. This provision will extend the transition period for the installation of Tier 4 engines on equipment without placing undue pressure on manufacturers. **It is very important that notification to the designated compliance and enforcement officers be provided by January 1st of the first year of the intended use of these “flex” provisions.** This notification must include both your company’s and parent company’s name and address, a contact within your organization, the calendar years you expect to use the provisions in, the name and address of your engine source, your estimate of the number of engines in each power category, and the number of units you have sold in each power category in the previous calendar years (1039.625 (g)).

**Applicability:**
To apply for a flex provision, you must have primary responsibility for designing and manufacturing the equipment in which the engines are used (1039.625 (a)). These provisions last for seven years from the time the engine group is subject to the regulations. If you do not use the flex provisions, they can be deferred for a limited time (1039.625 (a)(i)). **Third party equipment importers are not eligible to use these flex provisions and are subject to the original manufacturer’s flex allocations.**

**Flex allowance calculations:**
Several methods may be used to calculate the flex provisions:
1) Flex allowances can be calculated as a percentage of production applied across 7 years with a sum of the individual year percentages not to exceed 80% for the 7 year period for each engine category.
2) A “Small Volume” allowance may be applied in one of two ways:
   a) Up to 700 engines may be used per power category in a 7 year period with no more than 200 in any given year.
   b) Up to 525 engines may be used below 174 hp with a maximum of 150 in a given year while using up to 350 engines above 174 hp with no more than 100 in a given year over the 7 year time period (1039.625 (b)).
Stock previous Tier engines are not to be included in these calculations as exempt engines, but are included in the total of machines made (1039.625 (d)).

There are allowances for early compliance and for engineering hardships, which are not covered in this cover sheet but are addressed in the attached white paper.

**Flex documentation and record keeping:**
Equipment manufactured using the flex allowance MUST be properly labeled in English showing the exemption status visibly on the engine AND on the equipment itself. Further, the sulfur content of the fuel required for the machine MUST be clearly marked on the unit (1039.625 (j)).

A thorough record of the flex status of the engines must be created and maintained for at least 5 years past the final year of allowance. Incomplete engines are included in this recording requirement. An annual report on the previous years flex consumption must be filed by March 31st of the current year. There will be a cross reference performed between the Engine Manufacturer’s report and the report from the OEM to determine compliance. Failure to record AND report the flex engine usage is considered a failure of both the equipment manufacturer and the engine manufacturer (1039.625 (h)).

In some cases, it may be impractical for the engine manufacturer to provide a complete engine package including the emission after treatment device as an assembly. In those instances, there must be a contractual arrangement for the final assembly to be completed in a certified configuration covered by a certificate of conformity. The engine manufacturer must supply the required components and maintain complete records of the engines provided to equipment manufacturers in this incomplete configuration.

Engine manufacturers will be allowed to sell non-compliant engines to replace those that fail in service.

**Flex responsibilities:**
Engine manufacturers and equipment manufacturers are both responsible for implementing the rules that govern the flex provisions. Third party equipment importers are not eligible to use these provisions and are subject to the original equipment manufacturers’ allotment of flex upon posting bond.

This bond is equal to ten percent (10%) of the value of the engines based upon the anticipated full year’s usage. The bond is held for 5 years beyond the end of the flex expiration and is not refundable until the end of the five year period. There is a 90 day replenishment requirement if the bond is used to satisfy a judgment.

Please consider this brief an overview that does not address all aspects of the provision. It is not intended to replace a thorough understanding or legal review of the regulation. We have attached a “white paper” that goes into more detail, including examples of calculating the flex provisions and strategic approaches to take when applying the provisions to optimize the commercial impact. You are encouraged to seek legal counsel regarding the interpretation of this information and the EPA standards.

For more information contact your regional EPA office or either:

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