



## **Carl Moyer Program Advisory 4-004**

### **Protocol for Demonstrating Functional Equivalency for Non-OEM Rebuilders Under the Carl Moyer Program**

*This page updated May 10, 2004*

The Carl Moyer Program provides funding opportunities for equipment repowers using rebuilt engines. In accordance with the recently revised Carl Moyer Program guidelines, a non-original equipment manufacturer (OEM) rebuilt engine must be “*functionally equivalent*” to an OEM rebuilt engine with regard to emissions and durability (Carl Moyer Program Guidelines, 2003, p.17, par. 3). This advisory describes the protocol for demonstrating functional equivalency of non-OEM rebuilt engines for purposes of the Carl Moyer Program.

#### **How to demonstrate functional equivalency**

The following actions are necessary and sufficient for Carl Moyer Program applicants to follow when demonstrating functional equivalency.

The Carl Moyer Program applicant must:

- Submit to the Air Pollution Control Officer/Executive Officer of the governing air district a list of non-original equipment parts used (or to be used) in the rebuilt engine and the corresponding components that they replace.
- Submit a letter of qualification from the rebuilder who performed (will perform) the work.
- Submit a detailed description of the work (to be) performed on the engine.

The following further explain minimum these requirements:

#### List of functionally equivalent parts

Carl Moyer Program applicants proposing to use non-OEM rebuilt engines must submit to the Air Pollution Control Officer/Executive Officer of the governing air district the following information for each rebuilt engine:

- The serial number, make, model year and configuration of the original engine
- The component parts list (CPL) or arrangement numbers for the original engine
- The original equipment (OE) number and description of parts replaced
- The replacement part identification number

- A statement that the non-OEM replacement parts are functionally equivalent to the corresponding OE parts

The applicant or the non-OEM replacement part manufacturer must also comply with any request from the ARB or Air Pollution Control Officer/Executive Officer of the governing air district for any additional information, including sample parts for inspection and records required by section 2221 (b) of title 13 of the California Code of Regulations.

#### Letter of qualification

Any Carl Moyer Program applicant proposing to use a non-OEM rebuilt engine must submit a letter of qualification from the rebuilder addressed to the Air Pollution Control Officer/Executive Officer of the governing air district. The letter should describe the rebuilder's operations and experience. It must include the following:

- The name and address(es) of the rebuilder
- The length of time the rebuilder has been operating
- The number of employees and how many are actually involved in rebuilding engines
- The type of heavy-duty parts it rebuilds (full engines, fuel systems, blocks, etc.)
- The number of items it normally rebuilds annually
- Background and experience of the owners including education, training and certifications; previous heavy-duty engine rebuild experience; and any experience with an OEM or its franchised dealers
- Whether the business specializes in any particular type or make of heavy-duty engine or parts
- Whether it has performed work under the Carl Moyer Program; any other state or local program; or for any Federal, state or local agency
- Whether it has ever been investigated for malpractice or tampering with heavy-duty engines and if so, the results of the investigation

The letter must be signed by the owner of the business and must include the following statement:

*"I affirm that the rebuilt engine described in the Carl Moyer Program application uses (will use) only OE parts or non-OE parts from the parts list submitted to the air district. Furthermore, the rebuilt engine is (will be) functionally equivalent from an emissions and durability standpoint to the OEM engine it is replacing."*

After review of the letter the air district or ARB may request additional information.

#### Description of work (to be) performed

The Carl Moyer Program applicant must submit an additional letter describing the proposed work or work already performed on the rebuilt engine. The letter must confirm that the parts used are equivalent to the CPL parts or corresponding arrangement number parts and that the rebuilt engine has the same configuration as the original engine. In addition, any re-calibrations or adjustments performed on the engine or

engine components must be set forth in detail, as well as any work performed on parts that were taken out of the engine and re-inserted.

The letter must also state that the rebuilt engine is functionally equivalent to an OEM rebuilt engine with regard to emissions and durability. Any test data that substantiate these emission claims shall be attached or included in the letter.

### **Other restrictions and considerations**

The ARB may require emission testing on any engine, whether rebuilt by an OEM or non-OEM rebuilder. Engine testing may be specified prior to approval of a project as a condition of the grant for all rebuilders rebuilding under the grant, but normally will not be specified unless ARB has reason to believe that a proposed rebuilt engine will not be functionally equivalent from an emissions and durability standpoint to the OEM engine it is replacing. Engine testing may also be required after the project has been completed, in cases where there is evidence of malpractice or tampering. Engines that do not achieve the stated emission levels may be denied all or part of the requested funding. In cases where the money has already been disbursed, the applicant will be responsible for providing an acceptable engine or for reimbursing the state for Carl Moyer Program funds expended. In addition, other penalties may apply.