



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF MINE SAFETY

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September 8, 2010

Mr. Arnemann Grender
Johnson Industries, Inc
101 Pine Fork
Pikeville, Kentucky 41501

RE: **Final Approval** of Johnson Industries request to use an MSHA approved Donaldson filter (P550025) on the remote crankcase oil breather system on the Deutz BF4M 2011 engines.

Dear Mr. Grender:

On April 29, 2010, Johnson Industries submitted a request to the Technical Advisory Committee for evaluation and approval of a remote crankcase oil breather system on the Deutz BF4M 2011 engines.

The proposed remote breather system is made up of a small pipe or hose that feeds the crankcase ventilation through an oil filter instead of into the intake manifold, thus keeping the oil vapors from entering the intake manifold. This system has been approved by MSHA for the Deutz BF4M2011 engines.

On June 1, 2010 the TAC traveled to Tracy Lynne Mine to conduct their investigation. Raw emission tests were conducted with the breather installed and also with the breather disconnected. Emissions test results were similar for both investigations. The filter location was discussed. The filter was installed above the crankcase vent hole so oil could not accumulate in the hose. The length of the hose used for the remote breather was questioned as well as the remote breather filter replacement frequency.

Based upon the testing that was conducted, the TAC's investigation and observations confirmed that the use of a remote crankcase oil breather system on a Deutz BF4M 2011 engine is capable of meeting all requirements of Chapter 4 of the Act without reducing or compromising the level of health or safety afforded by the Act. The TAC recommended specific approval of the use of the remote crankcase oil breather system on the Deutz BF4M 2011 engines with the following stipulations:


- The filter used on the remote breather system must be an MSHA approved Donaldson filter P550025 which is 95% efficient.
- The filter should be tagged or labeled to identify it as the remote breather filter.

- The pre-op check list should be modified to include a visual check of the filter for excessive oil accumulation on the filter, and if an oil accumulation is found, the filter is to be changed before use.
- The length of the MSHA approved oil resistant breather hose should not exceed 3 feet in length.
- The 100 hour maintenance check list should be modified to include changing the remote oil filter during every 100 hour maintenance, and more often if needed.

Based on the information provided and the TAC recommendation, the Department *approves* Johnson Industries request to use an MSHA approved Donaldson filter (P550025) on the remote crankcase oil breather system on the Deutz BF4M 2011 engines.

Should you have any questions regarding the process, contact my office at the above phone number.

Sincerely,


Joseph A. Scaffoni
Director
Bureau of Mine Safety

Enclosures

cc: Ron Bowersox/TAC
Paul Borchick/TAC
Gene Davis

JAS:WBB:cd
WBB

bcc: Bookshar
Martin
McCaffrey
Gaida
Antoon
TAC file/Dunn

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