

**Fayette County Health Center  
100 New Salem Road, Room 167  
Uniontown, PA 15401**

December 9, 2008

**Bureau of Mine Safety**

724-439-7469  
Fax 724-439-7324

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

RE: **Tentative Approval** of Johnson Industries Model SS rubber tired mantrip with a Deutz BF4L 2011 74 HP diesel engine and an engine Control System Silicon Carbide filter and Engine Control System Oxidation Catalyst utilizing Off Board Regeneration

Dear Mr. Grender:

This letter acknowledges receipt of a November 1, 2008, letter from David C. Sharkins of Rosebud Mining Company requesting tentative approval to use the Johnson Industries Model SS rubber tired mantrip with a Deutz BF4L 2011 74 HP diesel engine and an Engine Control System Silicon Carbide filter and Engine Control System oxidation catalyst at the Tom's Run Mine.

On November 14, 2008 the TAC and BMS traveled to Rosebud Mining's Shop to inspect the equipment and evaluate the need for an Alternate Test Procedure for testing CO emissions. On November 25, 2008 BMS conducted a follow-up inspection of the diesel powered mantrip.

Based on the information provided and the TAC recommendation, the Department **temporarily approves** the Johnson Industries Model SS diesel powered mantrip with a Deutz BF4L 2011 74 HP diesel engine with an Engine Control System Silicon Carbide filter and Engine Control System oxidation catalyst. The requested 90 second alternate test procedure for emission checks is also approved. This **temporary approval** includes a 90 day trial period to allow for further evaluation of the complete system and allow for a practical evaluation of the ceramic filter as a flame arrestor. This **temporary approval** includes the following items:

- Addition of a temperature sensor in the swirl box, where the hottest surface temperature was detected, to monitor the temperature in the swirl box to identify a problem with the cooling fan or system. The sensor would be attached to a cooling fan shut down gauge mounted in the operator's compartment which would show an alarm if the temperature in the box exceeded acceptable levels, which would be determined during the 90 day period.

- Examinations of the exhaust cooling fan during every service interval and filter change to ensure it is in good operating condition and record the condition on the checklist.
- Clean out the swirl box during every service interval and filter change to ensure that there is no accumulation of coal or combustible material in the box.
- Include in the pre-op check list the examination of the exhaust cooling fan intake for any obstructions and the condition of the swirl box to be free of damage or leaks

The General Specification Sheet must be strictly complied with. The PA ventilation rate for this engine is 6,000 cfm. This diesel mantrip is strictly for use in intake aircourses outby the last permanent ventilation wall.

The next scheduled meeting of the Diesel Technical Advisory Committee is scheduled for January 15, 2009, upon which time a formal recommendation will be provided.

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

Sincerely,

Joseph A. Scaffoni  
Director  
Bureau of Mine Safety

Enclosures

cc: Ron Bowersox/TAC  
Paul Borchick/TAC

bcc: W. Bookshar  
A. Martin  
M. McCaffrey  
S. Gaida  
R. Ceschini  
D. Walter  
B. Pontani  
G. Letzo  
TAC file/C. Dunn

JAS/WBB/cd

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Rubber Tired Mantrip.doc