

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

January 23, 2008

**Bureau of Mine Safety**

724-439-7469  
Fax 724-439-7324

Mr. Jim Coe  
Senior Mechanical Engineer  
DBT America Inc.  
4041 Wumo Road  
Pulaski, VA 24301

RE: **Final Approval** of DBT America Inc.'s 488D Un-A-Trac Diesel Scoop with a Deutz BF4M 1013 FC 157 HP engine with an Engine Control Systems Model S-18 Silicon-Carbide Filter and 90-second alternate test procedure for the 5-minute CO tests as required in Section 217 and 218 of the Diesel Act

Dear Mr. Coe:

On November 14, 2007, the Bureau of Mine Safety (BMS) and the Technical Advisory Committee on Diesel-Powered Equipment (TAC) completed an evaluation of the equipment and conducted emissions tests. The TAC also evaluated the need for the 90-second alternate test procedure during this evaluation. On November 26, 2007, BMS issued a temporary approval of the equipment. In addition, your request for the 90-second Alternate Test Procedure was not approved at that time because the equipment was capable of completing a full 5-minute test.

Based on the evaluations and inspections by the Department and the TAC, data provided by DBT, and the TAC's January 7, 2008, recommendation, the Department approves the Deutz BF4M 1013 FC 157 HP engine with an Engine Control Systems Model S-18 Silicon-Carbide Filter for use in a DBT Model 488D Un-A-Trac scoop with the following requirements:

- The flame arrestor shall be cleaned during each 100-hour service test.
- A smoke dot test conducted at the same time with the results recorded in the record book. Should the smoke dot test produce a result of 3 or greater, the equipment should be removed from service and the Department notified.
- The enclosed General Specifications sheet must be strictly complied with. The PA ventilation rate for this engine is 6,500 cfm.

On December 26, 2007, Mr. David C. Sharkins provided additional information and a request for further consideration regarding the 90-second alternate test procedure. This information was provide to the TAC, and it was determined that transmission oil temperatures in excessive of 290 degrees Fahrenheit would be detrimental to the transmission and could result in premature failure of this equipment. During the January 9 meeting, the TAC recommended approval of the 90-second alternate test procedure.

Therefore, based on the information provided and the TAC's recommendation, the Department approves the 90-second alternate stall test procedure for the Deutz BF4M 1013 FC 157 HP engine with an Engine Control Systems Model S-18 Silicon-Carbide Filter in the DBT America Inc.'s 488D Un-A-Trac Diesel Scoop. The Department approves the TAC recommendations because the alternative method will not reduce or compromise the level of health and safety protection afforded by Article II-A of the Act. A copy of the approved alternate test procedure is enclosed.

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  
David C. Sharkins, Rosebud Mining Company

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

JAS/WBB/adg

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