## BUREAU OF MINE SAFETY

January 31, 2011

Mr. Roger Gibbs Dry Systems Technologies 8102 Lemont Road, Suite 700 Woodridge, IL 60517

Re: ITEM: Gunther-Nash Diesel Endloader / Mucker

MODEL: GN953 SERIAL NO. M400193 HP: 150 HP @ 2200 RPM

**APSID#:** 719891

APPROVAL NO. BFE-D 17-11

**ENGINE MFG:** Cummins **MODEL:** C8.3T **HP:** 150

**EMISSIONS SYSTEM TYPE:** DST Model M250 EMISSIONS SYSTEM CONSISTING OF A DST M90-218-02 CATALYST, A DST M90-301-11 HEAT

EXCHANGER AND A DST M30-411-01R EXHAUST FILTER.

BFE DEES NO. BFE DEES 19-11

PA VENTILATION RATE: 13,500 CFM

Dear Mr. Gibbs:

We have completed our evaluation of the equipment noted above, and approve its use for the development slope project at Enlow Fork – Oak Springs Slope Project. The equipment meets the legal requirements of the Pennsylvania Bituminous Coal Mine Act.

Approval is granted for this equipment with the understanding that the General Specification Sheet (Attachment 1) is strictly adhered to. The following additional stipulations apply for this approval:

- This approval is site specific to the Gunther Nash Enlow Fork Oak Springs Slope Project and to the Model GN 953 diesel end loader / mucker.
- Permissibility testing on the engine and emissions control system shall be done as follows:
  - 1. The DST feeler gage must be used for permissibility on all readily accessible joints and gaskets.
  - 2. A gauge must be installed on the intake system to measure the turbo boost pressure. If the gage shows a reduction in boost pressure of 25% or greater, then it may indicate a leak. In this case, the equipment shall be taken out of service until it can be determined if there is a leak in a permissible fitting.
  - 3. A gas detector (sniffer) must be used on the exhaust system to check for leaks around joints or gaskets that are not readily

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accessible. The gas detector may detect CO, NO2 or other exhaust gasses. When the reading of the specific exhaust gas is above ambient there is indication of a leak. In the case of a leak, the equipment shall be immediately taken out of service until the leak is repaired. All trained diesel mechanics that do the permissibility checks will be trained in the use of the specific gas detector (sniffer) and the procedures to check for leaks using the detector. This training will be recorded. The gas detector will be maintained and calibrated monthly or according to the manufacturer's recommendations.

Pennsylvania approval number BFE D 17-11 has been assigned to the equipment. This number must appear conspicuously on the outside of the subject equipment on a **2"x 4"** rust-resistant metal plate, or any other Bureau acceptable material. The approval plate should read "Commonwealth of Pennsylvania" and "Approval No. BFE D 17-11. The plate and lettering should be resistant to removal by abrasion.

If you want to make changes or alterations on this equipment, a written request outlining the proposed changes, together with any related prints or drawings, must be submitted to this office for approval. If you have any questions, please contact me at the telephone number below.

Sincerely,

Joseph A. Sbaffoni

Director

Bureau of Mine Safety



**BUREAU OF MINE SAFETY** 

October 26, 2012

Scott Brown Gunther-Nash 8800 Page Avenue St. Louis, MO 63114

Re:

ITEM: Gunther-Nash Diesel Endloader/Mucker

MODEL: GN953 SERIA

**SERIAL NO.** M400193

HP: 150 HP @ 2200 RPM

**APSID#:** 791128

**MODIFICATION OF APPROVAL NO. BFE-D 17-11** 

ENGINE MFG: Cummins MODEL: 6CTAA8.3 HP: 185

**EMISSIONS SYSTEM TYPE:** DST EMISSIONS SYSTEM CONSISTING OF A DST M90-218-02 CATALYST, A DST M90-301-11 HEAT EXCHANGER AND A DST M30-411-01R EXHAUST FILTER.

BFE-DEES NO. BFE-DEES 131-12 This approval voids BFE-DEES 19-11\*\*
PA VENTILATION RATE: 19.000 CFM

\*This approval requires a new vent plate with a PA rate of 19,000 CFM

\*\*Note revision of voided BFE-DEES number

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  - 3. A gas detector (sniffer) must be used on the exhaust system to check for leaks around joints or gaskets that are not readily accessible. The gas detector may detect CO, NO2 or other exhaust gasses. When the reading of the specific exhaust gas is above ambient there is indication of a leak. In the case of a leak, the equipment shall be immediately

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R.a. Duffan

Sincerely,

Joseph A. Slaffoni

Director

Bureau of Mine Safety