

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

Bureau of Deep Mine Safety

724-439-7469

Mr. Eli Schmader
Brookville Equipment Corporation
175 Evans Street
P. O. Box 130
Brookville, PA 15825

Re: Recommendation for approval of the Cummins 4BTA 3.9C 116 HP diesel engine with M70 DST exhaust emission control system

Dear Mr. Schmader:

Article II-A of the Pennsylvania Bituminous Coal Mine Act (Act) establishes the standards and procedures for using diesel-powered equipment in Pennsylvania's underground bituminous coal mines. Section 224-A of the Act establishes the Technical Advisory Committee on Diesel-Powered Equipment (TAC) whose duties include reviewing requests to use alternative technologies or methods to comply with the requirements of the Act. Any alternative technology or methods recommended by the advisory committee and approved by the Department shall not reduce or compromise the level of health and safety protection afforded by Article II-A.

The TAC has reviewed the results of the ISO 8178 data for the Cummins 4BTA 3.9C 116 HP naturally aspirated engine and related information submitted by Brookville Equipment Corp. Also included are the ISO 8178-1 test results for the MWM D916-6 and the Isuzu 6BG1 diesel engines, both of which were equipped with the DST after-treatment systems. The test results of these exhaust emission control systems show an average DPM reduction of 96.23 percent. After reviewing all supporting documentation, the TAC determined that the data reliably verifies that the exhaust emissions control and conditioning system for the Cummins 4BTA 3.9C diesel engine equipped with the M70 DST system will perform in a manner consistent with the requirements of Section 203-A (a)(1) of the Pennsylvania Bituminous Coal Mine Act. Based upon this determination, the TAC recommended that the Department approve the Cummins 4BTA 3.9C 116HP diesel engine equipped with the Paas Technologies M70 DST exhaust after treatment system.

Based on the information provided and the TAC recommendation, the Department approves the Cummins 4BTA 3.9C 116 HP diesel engine equipped with the Paas Technologies M70 DST Management System. 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. The diesel engine and exhaust system approval number for the Cummins 4BTA 3.9C 116HP diesel engine equipped with the Paas Technologies M70 DST Management System is BOTE-DEES-000705. The Pennsylvania ventilation rate for this system is 6500 cfm. This ventilation rate is to be stamped on a plate and attached to the engine and

exhaust after-treatment system in a conspicuous place. The requirements of the General Specifications sheet dated July 27, 2004, and an exhaust gas shut down temperature of 285° F are to be strictly adhered to.

Should you have any questions concerning this, please contact me at the above number or e-mail me at jsbaffoni@state.pa.us

Sincerely,

Joseph A. Sbaffoni
Director
Bureau of Deep Mine Safety