

**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 QSB 240 5.9 190 HP diesel engine with M295 DST 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 TAC and approved by the Secretary shall not reduce or compromise the level of health and safety protection afforded by Article II-A.

Previously, the Secretary tentatively approved the Cummins QSB C240 5.9 190 HP turbo charged diesel engine equipped with the Paas Technologies M295 DST Management System. Subsequent to that tentative approval, and after 683 hours of operational time, the TAC conducted additional tests on the Cummins QSB C240-5.9 turbo charged engine and exhaust gas emission system. The outcome of those tests is documented in the TAC letter to the Department dated May 15, 2004. During this operational time, a significant change occurred in the untreated carbon monoxide (CO) emissions. For this reason, the TAC recommended establishing a specific baseline emission value of 72 ppm for the untreated CO for this particular engine. Based upon this determination, the TAC recommended that the Secretary issue final approval of the Cummins QSB C240 5.9 diesel engine equipped with the Paas Technologies M295 DST exhaust after treatment system and the establishment of an untreated CO baseline emission value to 72 ppm for this engine.

Based on the information provided and the TAC recommendation, the Secretary approves the Cummins QSB C240 5.9 190 HP turbo charged diesel engine equipped with the Paas Technologies M295 DST Management System. The engine is not to exceed 190 hp or the rated speed of 2,200 rpm. Should the Hi Idle rpm exceed rated speed plus 10 percent, 2,420 rpm, the equipment will be immediately removed from service. The Secretary approves the TAC recommendations because the testing indicates this engine and system 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 QSB C 240 5.9 190 HP

diesel engine equipped with the Paas Technologies M295 DST Management System is BOTE-DEES-000704. The Pennsylvania ventilation rate for this system is 13,350 cfm. This approval number and ventilation rate are to be stamped on a plate and attached to the engine and exhaust after-treatment system in a conspicuous place. The Cummins Bridgeway Product Change Request dated November 24, 2003, is included as part of this approval package. The requirements of the General Specifications sheet dated January 20, 2004, and an exhaust gas shut down temperature of 285 degrees Fahrenheit are to be strictly adhered to. A baseline emission value of 72 ppm for untreated CO is set for the engine with serial number 46331180. This turbo charged diesel engine is to be operated under the manufacturers recommendations in regard to idling. These recommendations should be incorporated into your training program.

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