

**RE: Informational Bulletin on Diesel-Powered Equipment
Best Practices for Diesel-Powered Equipment**

The Bureau of Mine Safety is issuing the following informational bulletin for guidance concerning diesel-powered equipment as referred to in Chapter 4 of the Pennsylvania Bituminous Coal Mine Safety Act. The Technical Advisory Committee on Diesel-Powered Equipment (TAC) conducted a review of current operating and maintenance practices and offered the following as guidance to maintaining Pennsylvania's diesel fleet as the premier diesel fleet in underground coal mines. Additionally, both union and management personnel are to be commended for their professional work and cooperation in maintaining the diesel powered equipment record books as required in the Act.

The TAC and the Bureau recommendations are:

- *All maintenance books have the original baseline emissions numbers and the date of the original baseline, together with machine serial number, prominently displayed on the front cover of each record book.*
- *When a machine is transferred from one mine to another, the maintenance books must accompany the machine.*
- *Emissions testing should be performed in high gear rather than 2nd gear.*
- *It is not necessary to check items such as speed, torque, etc more than once during each 100-hour test.*

Additionally, the following recommendations are to ensure that checks for gaseous emissions represent the true maintenance of the fleet. The TAC and the Bureau recommends that:

- *Operators use an instrument capable of monitoring CO₂ during emission testing. This will ensure that the engines are properly lugged during the emission tests and repeatable test results will be achieved. For specific engines, refer to MSHA's CO₂ lug curves, if available. When these lug curves are not available, CO₂ readings near 8 % for turbo-charged engines and 10 % for naturally aspirated engines can be used as a general rule of thumb, and*
- *An additional set of secondary test ports be located as close as possible to the engine.*