



STATE OF WEST VIRGINIA
OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING
BUREAU OF COMMERCE

1615 WASHINGTON STREET, EAST • CHARLESTON, WEST VIRGINIA 25311-2126 • TELEPHONE: (304) 558-1425 • FAX: (304) 558-1282

EASTON CAPERTON
GOVERNOR

MEMORANDUM

STEPHEN F. WEBBER
DIRECTOR

TO: Inspectors-at-Large

FROM: Stephen F. Webber, Director *S. F. W.*

DATE: April 9, 1996

RE: W. Va. Code §22A-2-40(8)

W. Va. Code §22A-2-40(8) and Title 36, Series 12, Section 4.8 states "All unattended underground loading points where electric-driven hydraulic systems are used shall utilize a fireproof oil or emulsion". Fireproof oils usually contain esters which could be harmful to any nonferrous metal inside the pump and would probably require the system to be rebuilt to remove the brass and change the seals. Emulsion oil may also cause the components to wear out at an increased rate.

Therefore, I recommend waivers be granted for these systems to use MSHA approved fire-resistant hydraulic oil instead of the fireproof or emulsion oil specified above.

In addition to using fire resistant oil, I also recommend the following conditions to be adhered to:

1. Move unattended electric-driven hydraulic units at least two feet (2') from coal ribs, combustible materials and ignition sources; or build a four inch (4") thick solid block wall where clearance is limited.
2. As part of a chemical fire suppression system install enough chemical canisters to provide adequate coverage for each unit such as tension winches, belt brakes, belt take-ups, etc.
3. Center the chemical fire suppression system canisters over the equipment and hang canisters with chain or wire.
4. Install one 30 square foot chemical fire suppression system for each hydraulic brake unit.
5. Provide fire resistant hoses for all unattended electric-driven hydraulic systems.
6. Promptly clean up spilled lubricants at all hydraulic units.