Safety Modifications for Coal Storage Pile Mobile Equipment and Procedures for Access to Coal Storage Piles

1 PURPOSE

To eliminate exposure to personal injury or property damage resulting from mobile equipment operators or other personnel becoming trapped in coal storage pile cavities created by open feeder systems or other coal storage pile incidents.

2 POLICY EQUIPMENT REQUIREMENTS

All dozers or other mobile equipment utilized to push coal on stockpiles which feed into an open hopper/feeder system in which the mobile equipment could be trapped or consumed must be equipped with the additional safety features and equipment listed:

- Fracture resistant safety glass certified to withstand 40 psi mounted with a window support system which is resistant to being pushed inward.
- Two-way communications between the operator and those persons who are operating/monitoring the conveyors, feeders and hoppers at storage piles. The system must be designed so that the antenna is protected from damage in case of entrapment.
- A remote control device capable of stopping both the flow of coal from the feeder system and the coal coming to the stockpile, including the belt systems.
- A means of providing emergency lighting for the mobile equipment operator.
- An SCSR (Self Contained Self Rescuer) capable of providing at least one hour of oxygen for the operator.
  - This unit shall be inspected daily and tested as required by the manufacturer. The results of the test shall be recorded in a log.
  - Mobile equipment operators shall receive quarterly training on the use of the SCSR.
- An extrication harnesses and lifelines for the operator and rescue personnel will be stored in a location where they can be accessed quickly in case of an emergency.

2 SYSTEMS FOR IDENTIFYING FEEDERS

Warning signs must be posted around all coal stockpiles with underlying coal feeders to alert mobile equipment operators of the potential hazard.

The location of all open hopper/feeders shall be clearly identified through a marking system that is easily visible to mobile equipment operators or the mobile equipment will be equipped with GPS systems. GPS is the preferred system where functional.

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2 TRAVELING ON FOOT ON COAL STOCKPILES

No person shall travel on foot on live or other coal storage piles except in an emergency basis. Each operation must have a written Stockpile Access Procedure on file to cover emergency situations and under no circumstances will employees be allowed to walk on the stockpile, unless both the conveyor system(s) supplying coal to and the feeder(s) drawing coal away from the stockpile have been de-energized and locked and tagged out. Determining stockpile inventories does not qualify as an emergency event; alternative methods for completing this determination must be utilized that do not require traversing the stockpile on foot.

2 REPAIR OF EQUIPMENT WHICH BREAKS DOWN ON COAL STOCKPILE

When mobile equipment has broken down on a live coal stockpile, precautionary procedures shall be implemented before repairs are begun.

- The conveyor system(s) supplying coal to and the feeder(s) drawing coal away from the stockpile have been de-energized and locked and tagged out.
- If the mobile equipment becomes disabled within 50 feet of the center of the feeder, the feeder will be pushed full and the area around the disabled equipment will be leveled to assure that there are no voids near the equipment.
- This requirement would necessitate that all applicable facilities have at least two pieces of mobile equipment with the safety features listed in the Policy – Equipment Requirements section.

Repair personnel working on or around the equipment in-order to facilitate repair, will do so only in compliance with the mine Stockpile Access Procedure.

2 STOCKPILE ACCESS PROCEDURE

Each operation with an active or other live coal storage pile will have a Stockpile Access Procedure which must be reviewed and approved by the Central Safety and Health Team. The procedure must at a minimum include the following elements:

- Lockout and Tag-out procedures for the feeder system.
- Procedures for any access of stockpile on foot.
- Communication protocol for individuals on the stockpile.
- PPE Requirements for stockpile work.
- Entrapment prevention measures to be followed.
- Entrapment extrication procedures for equipment and personnel.
- Procedures for addressing equipment repair on the stockpile.
- SOP for beginning push to feeder on pile.
2 MISCELLANEOUS REQUIREMENTS

All mobile equipment working coal stockpiles will be operated with the doors and windows closed.

Anti-glare cylinders should be considered for installation on dozers whose primary role is working on coal stockpiles.

2 DEFINITIONS

**Active Stockpile** Any coal stockpile that feeds into underlying feeder systems with the potential for pile cavity formation, regardless of the pile dimensions or the proximity of the pile edges to the feeder(s).