

providing miners a safe route to the surface. One method to help accomplish this would be to maintain the primary escapeway at a pressure that is higher than the adjacent entries.

However, the Advisory Committee recognized that, sometimes, it may be difficult to maintain the pressure differential in the proper direction. Because of the difficulty of maintaining the primary escapeway at a higher pressure than an adjacent air course, MSHA has decided not to propose this requirement. MSHA believes that the air quantity in the belt air course and the air quantity in the intake air courses along with the pressure differential between these air courses must be addressed on a mine by mine basis through the mine ventilation plan process (§ 75.370(a)). The intent is to control the total air quantity in the belt air course relative to the other intake air courses and also to control the pressure differential between the air courses. It is vital that the belt air course and the intake escapeway ventilation be addressed as part of the entire mine's ventilation system. The proper balance must be maintained regarding total air quantities in the air courses and pressure differentials between the air courses. This can be achieved on a mine-by-mine basis through the mine ventilation plan process.

In lieu of this requirement, proposed § 75.351(f) would require the mine operator to monitor the intake escapeway air current for fire contaminants at the beginning and end of the section panel.

MSHA has included in these proposed requirements to allow for the use of point feeding to provide air to the belt entry from other intake entries. MSHA agrees with the provisions listed by the Advisory Committee, and believes that proposed §§ 75.350(c) and 75.351(f), along with the existing construction requirements for regulators under § 75.333, (Ventilation controls), achieve the objective of the recommendation.

Advisory Committee Recommendation 10—It is the consensus of the Belt Air Advisory Committee that MSHA proceed rapidly to develop regulations for improved fire resistant belting, including new testing

and approval schedules. Notwithstanding the scope of the committee charter, the committee recommends that once available, the improved fire resistant belting material should be used in all underground coal mines.

This issue was placed in a separate rulemaking in 1989. Since that time the number and severity of conveyor belt fires has significantly declined. Only two of the ten conveyor belt fires reported between 1993 and 2002 involved injuries to miners. In both of these fires, the injuries were limited to smoke inhalation. We attribute this decrease in conveyor belt fires to improvements in belt monitoring and to technological advances which have occurred during the past 10 years.

The most notable improvement in belt monitoring is the mining industry's increased use of AMSs in conveyor belt passageways. Monitoring systems in general give advance warning to allow a fire in a belt entry to be detected and addressed sooner, thereby limiting fire damage and injuries to miners. An AMS also provides advanced warning of CO and methane concentrations, thereby alerting mine operators to potentially hazardous situations.

Although AMSs have been in use for many years, these systems have rapidly become more sophisticated, evolving from simple monitors into complex devices with integral computer technology capable of transmitting environmental measurements from remote locations to attended mine locations.

In addition, this proposed rule also reduces alert and alarm levels to 5 and 10 ppm, respectively, from levels specified in existing petitions for modification. Also, sensor spacing has been reduced from 2,000 feet to 1,000 feet. These additional safety requirements increase the level of fire safety in mines that choose to use belt air to ventilate working sections. Therefore, we believe that we have achieved the intent of this recommendation (reduction of belt fires) by lowering the alert and alarm levels to provide increased early warning of the presence of fire contaminants, as well as, reducing the spacing of the sensors.

Advisory Committee Recommendation 11—In mines using belt air to ventilate working places, the alert and alarm levels for AMS should not exceed 5 ppm and 10 ppm CO (or equivalent) above ambient, respectively. The MSHA District Manager may establish lower alert and alarm levels for AMS based upon the sensor type and sensitivity, sensor spacing, air flow, cross-sectional area and local mining conditions. Alerts and alarms should be automatically activated on the surface and on the working section(s) when the CO (or equivalent) levels exceed the established levels.

As previously discussed, proposed § 75.351(i) sets out the maximum alert and alarm levels at 5 and 10 ppm CO respectively. The District Manager can require lower alert and alarm levels according to this same section. The proposed rule meets all of the provisions of this recommendation of the Advisory Committee except automatic alert activation on working sections. In the section-by-section analysis of this preamble, we discuss our reasons for not including automatic alerts to be activated on working sections.

Advisory Committee Recommendation 12—In mines using belt air to ventilate working places, increased emphasis should be placed on belt entry cleanup and conveyor belt maintenance.

MSHA agrees with the Advisory Committee and believes cleanup and maintenance in the belt entry poses no less of a hazard in mines not using belt air. Accumulations of coal at drives due to spillage are prohibited according to existing § 75.400. We are not proposing any additional regulation for belt entry cleanup and maintenance.

D. Preamble Summary—Current Petition Requirements

We reviewed the latest 20 proposed decision and orders (PDOS) for petitions for modification of § 75.350 (Air courses and belt haulage entries) to determine common requirements for using belt air. Two-entry petition mines were not included in this analysis because these mines would still need to file petitions to use a two entry mining system as a result of this rule. The following requirements included in petitions are identified as follows.

TABLE 3.—COMPARISON OF REQUIREMENTS IN RECENT PROPOSED DECISIONS AND ORDERS (PDOS) WITH REQUIREMENTS IN THE PROPOSED RULE

Requirement in PDOS	Number of PDOS	Requirement included in proposed rule
Installation of AMS	20 out of 20	Yes
Spacing 1000 feet	20 out of 20	Yes
Monitor Drives 50–100 feet	20 out of 20	Yes
Monitor splits 50–100 feet	20 out of 20	Yes