

point-feed regulators must be shown on the mine ventilation map required by § 75.372 (Mine ventilation map). An accurate and complete map enables both the operator and MSHA to evaluate the ventilation system. It would also require that the operator show the locations of point-feed regulators on the escapeway map required by existing § 75.383. During escape, it is important that miners be aware of all aspects of the ventilation system that might affect their ability to exit the mine safely. Although a means for closure is required for all point-feed regulators, closing a regulator, as in making any air change during a fire, should be done only when a demonstrated need exists.

Proposed paragraph (c)(6) would require an AMS to be installed, operated, examined, and maintained as specified in proposed § 75.351 when point-feed regulators are used. This requirement would greatly increase protection for miners by increasing the level of atmospheric monitoring of areas where intake air crosses into a belt air course, thereby increasing the ability of the system to detect hazards before they can develop into serious threats.

Section 75.351 Atmospheric Monitoring Systems

This proposed standard sets out the installation, location, examination, maintenance, and operational requirements for AMSs. The Advisory Committee concluded that air in the belt air course could be safely used to ventilate working places if the mine operator meets certain conditions. The primary condition is the use within the belt entry of “* * * a reliable and properly specified, installed, calibrated, and maintained Atmospheric Monitoring System * * *” [Advisory Committee report, Page i]. The proposed standard sets out the requirements implementing that part of the Advisory Committee recommendation concerning the installation, calibration, and maintenance of the AMS to assure its reliability. The proper operation of an AMS is the keystone around which the safe use of belt air, and other provisions in this proposed rule, is based. We believe that current AMS technology is reliable. Since 1975, the year when an AMS was first required as a condition for the granting of a belt air petition, we have included performance criteria for an AMS as part of each petition granted. As AMS technology has evolved, the performance requirements in the granted petitions have also evolved. Performance requirements are included in this proposed standard.

Proposed paragraph (a) would require proper AMS operation. Whenever

personnel are underground and an AMS is used to fulfill the requirements of §§ 75.323(d)(1)(ii), 75.340(a)(1)(ii), 75.340(a)(2)(ii), 75.350(b), 75.350(c), or 75.362(f), the AMS must be operating and a designated AMS operator must be on duty at a location on the surface of the mine where signals from the AMS can be seen or heard and the operator can promptly respond to these signals.

Proposed § 75.351(a) would require that an AMS installed in accordance with §§ 75.350(b) or 75.350(c) monitor the mine atmosphere at all times that a belt air course is used to provide intake air to a working section or an area where mechanized mining equipment is being installed or removed and miners are underground. In general, this requirement is independent of belt operation or coal production on affected sections. An exception to §§ 75.350(b) or 75.350(c) would be when the belts are not operated and coal is not produced after a period exceeding 24 hours. Activities included in this exception are a production shut-down to complete non-production work (dead work) for several days or temporary mine closures due to market conditions, vacations, *etc.* However, it is recognized that normally it would be an advantage to the operator to keep the AMS operating at all times.

Our experience is that many fires in belt entries start after the belt is stopped. As discussed previously, a review of the reports of reportable belt entry fires confirms this. The 24-hour period is included in the proposed rule to address these concerns after a belt shut-down and to address extended idle periods when the likelihood of a belt fire diminishes. The four-hour period that is found in most current petitions for modification is being replaced with this more stringent requirement that the belt be monitored for 24 hours after the belt is shut down. This requirement is not intended to supercede the requirements in § 75.1103–4(e). The AMS must be operating and in compliance with §§ 75.350(b) and 75.350(c) one hour prior to restarting the belt.

This approach is consistent with the belt air petitions and the recommendations of the Advisory Committee. The proposed requirement is similar to existing § 75.351(d)(1), which requires a person designated by the operator be at the surface location while anyone is underground. This proposed requirement clarifies when the AMS must be operable and when the AMS operator must be at the designated surface location.

Proposed § 75.351(b) would require the operator to designate a surface location at the mine for receiving signals

from the AMS sensors or at another location approved by the district manager, and provide an AMS operator to respond to those signals when the system is used to comply with existing §§ 75.323(d)(1)(ii) (Actions for excessive methane, Return air split alternative), 75.340(a)(1)(ii) or 75.340(a)(2)(ii) (Underground electrical installations), or 75.362(f) (On-shift examination), and proposed §§ 75.350(b) or 75.350(c) (Belt air course ventilation). This would allow the district manager to address situations where there are multiple mines in close proximity in one area to share one designated surface location that would provide the same degree of effective monitoring and early-warning protection.

As with the existing standard, under paragraph 75.351(b)(1) of the proposed rule, the responsible person would have access to two-way voice communication with persons at working sections, at setup or removal areas, and at other areas included in the approved program of instruction, § 75.1502. These areas would be equipped with two-way communication in accordance with existing § 75.310(a)(3). These other areas may include belt drives, belt transfer points, underground dumps, and underground shops. We do not intend it to mean areas where persons are assigned to work on a temporary basis, such as areas where miners are installing auxiliary supports or where they are making repairs to track haulage systems.

Proposed paragraph (b)(2) would require the operator to designate an AMS operator to monitor the AMS output and be at a location on the mine surface where all AMS signals can be responded to promptly. Proposed paragraph (b)(3) would require the posting at the surface location of an up-to-date map or schematic showing air flow directions and the location and type of all AMS sensors. The map or schematic could be displayed or stored in the AMS computer and retrieved when needed. By posting an up-to-date map showing the locations and types of AMS sensors and the intended air flow direction, the responsible person will be better able to identify the affected areas of the mine. The proposed requirement is similar to the requirement in existing § 75.351(d)(1) requiring the posting of a mine map showing the underground monitoring system at a surface location. We would require the AMS operator to notify appropriate personnel in response to a malfunction, alert, or alarm signal. The AMS operator could be the person initiating the approved program of instruction or could notify the responsible official for initiating the