

in the **Federal Register** on January 27, 1988 (53 FR 2382). Included in that proposed rule were provisions to allow air coursed through the belt entry(ies) to ventilate working places. That proposed rule would have required mine operators to install carbon monoxide (CO) sensors in the belt entry.

In response to public comments submitted to the Agency on the January 27, 1988 proposed rule, we held six public hearings in June 1988 with the rulemaking record closing in September 1988. Based on public comments received during this period, MSHA's Assistant Secretary called for a thorough review of safety factors associated with the use of air in the belt entry in the working places in March 1989. MSHA completed this review and announced in an August 25, 1989 Notice in the **Federal Register** (54 FR 35356), the availability of the Belt Entry Ventilation Review (BEVR) Report. The report concludes that " \* \* \* directing belt entry air to the face can be at least as safe as other ventilation methods provided carbon monoxide monitors or smoke detectors are installed in the belt entry."

After the BEVR report was issued, we reopened the ventilation rulemaking record and held a seventh public hearing in April 1990, to receive public comment on issues raised in the report. The reopened ventilation rulemaking record for the 1988 proposed rule closed in May 1990.

Comments received during and after the seventh public hearing expressed widely divergent views on the recommendations of the BEVR Committee. Commenters representing industry and academia stated, for the most part, that the use of air in the belt entry provides positive ventilation and reduces the possibility of a methane build-up in the belt entry. Commenters from labor, on the other hand, maintained that the use of air in the belt entry reduces safety due to increased fire hazards and greater dust levels.

Due to these divergent views, when the ventilation rule for underground coal mines was finalized in 1992, it did not include provisions that would have allowed mine operators to use belt air to provide additional intake air to working sections. MSHA's existing standards do not allow this practice except as approved on a mine-specific basis through the petition for modification process (30 CFR part 44) or when approved by the MSHA district manager for mines opened prior to March 30, 1970. The final ventilation rule retained the requirements of the existing 30 CFR 75.326.

MSHA decided that the use of air in the belt air course (belt air) to ventilate working places should continue as an independent rulemaking effort. As part of this effort, the Secretary of Labor appointed an Advisory Committee in January 1992 and charged it to make recommendations concerning the conditions under which air in the belt entry could be safely used in the face areas of underground coal mines. This committee was designated as the Department of Labor's Advisory Committee on the Use of Air in the Belt Entry to Ventilate the Production (Face) Areas of Underground Coal Mines and Related Provisions (Advisory Committee). The Advisory Committee held six public meetings over a six-month period. After reviewing an extensive amount of material, the Advisory Committee concluded that air in the belt entry could be safely used to ventilate working places in underground coal mines, provided certain precautions were taken.

The Advisory Committee made twelve recommendations to support this conclusion. The Advisory Committee submitted its report to the Secretary of Labor in November 1992. We published a December 2, 1992 Notice (57 FR 57078) in the **Federal Register** announcing the availability of the Advisory Committee's final report and stated that we would review its recommendations.

In the preamble of the rule proposed today, we discuss the recommendations of the BEVR Report and the Advisory Committee. The proposed rule also incorporates MSHA experience with petitions for modification under § 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act).

In instances where we have not followed a recommendation made in the BEVR or Advisory Committee Reports, we either have determined existing standards are adequate to address the issue raised in the recommendation or believe that mining technology has advanced making the recommendation moot. In either case, we provide an explanation in this preamble.

#### *B. Agency Experience*

Since the early 1970's, mine operators have used Atmospheric Monitoring Systems (AMSs) to monitor certain aspects of the mine atmosphere. These systems typically can measure environmental parameters related to mine ventilation, air quality, and fire detection. An AMS, equipped with the proper sensors, can measure concentrations of combustible and toxic gases, oxygen levels, air velocity, and products of combustion, such as carbon

monoxide (CO) or smoke. Existing § 75.351 (Atmospheric monitoring system), § 75.323 (Actions for excessive methane), § 75.340 (Underground electrical installations), and § 75.362 (On-shift examination) incorporated this technology into underground coal mine safety standards. This technology is the basis for granting petitions for modification to § 75.350 (Air courses and belt haulage entries). It allows close monitoring of the mine atmosphere when belt air is coursed to working places.

As AMSs have become more sophisticated, they have employed computer technology to transmit environmental measurements from remote locations to attended mine locations. These systems generate alarms, store and catalog data, and provide reports. Many computer-based monitoring systems have other capabilities besides atmospheric monitoring. Some systems monitor equipment status and, sometimes, provide control signals as well. Such applications improve surveillance of production and haulage, equipment maintenance, and other related management information.

During the last 15 years, MSHA has evaluated, through the petition for modification process, the safe use of belt air as intake air. This process permits a mine operator to petition that the application of 30 CFR § 75.350 be modified at a particular mine.

MSHA has granted approximately 90 petitions for modification to use belt air to ventilate working sections. MSHA grants such a petition when it determines that a mine operator has an alternative method which provides the same measure of safety protection as the existing standard, or when the existing standard would result in diminished safety protection to miners.

Only after a thorough on-site investigation verifying that the use of belt air is at least as safe as the existing safety standard does the Agency grant each petition. In the Agency's evaluation of the use of belt air, MSHA concluded that belt air can be safely used, provided that certain conditions are met. Specifically, the Agency found that the safety concerns associated with belt air use are sufficiently addressed by the proper installation, operation, examination, and maintenance of AMSs as part of a comprehensive safety program that contains other requirements. Petitions for modification of 30 CFR 75.350 (belt air petitions) contain the requirement that a mine operator install an AMS to monitor the mine atmosphere.