

instances, the proposed rule would allow a mine operator, with the approval of the Administrator of Coal Mine Safety and Health, to use either PAPRs or administrative controls or a combination of both to supplement engineering or environmental controls to reduce the dust exposure of individual miners. Approval to use supplementary control measures would be contingent on the mine operator adopting new engineering and environmental controls when they become available. The proposed rule also recognizes that there may be special situations that occur intermittently and for short periods of time where the approved dust control measures may not protect miners from overexposure. An example would be where the operator is required to mine through a rock parting with high quartz content. In these situations, the district manager may allow the operator to use PAPRs for a period not to exceed 30 calendar days.

This proposed rule would require that the mine operator provide a copy of any request for supplemental controls to the representative of the miners. This would provide an opportunity for miners' input prior to MSHA making any determination.

A full discussion of these and other provisions is provided in the section-by-section analysis of this proposed rule.

A number of commenters stated that MSHA's earlier proposed rule was incomplete because it did not address some key recommendations of by the Dust Advisory Committee, and by NIOSH in its Criteria Document (see sections II.E. and II.F. of the preamble). Some of these commenters expressed concern that the proposed rule failed to recognize and consider alternatives involving continuous dust monitoring technology. Since publication of that earlier proposed rule, technology has advanced to a point that will likely allow for continuous monitoring of dust exposures in the near future. Accordingly, this proposed rule has provisions that would allow mine operators to adopt such technology to meet the requirements for operator monitoring of dust control effectiveness and miner exposure.

The recommendations regarding exposure limits for respirable coal mine dust and crystalline silica were beyond the scope of either the single sample or plan verification rules. In the interim, MSHA enforcement efforts continue to focus on lowering the quartz exposure of miners as recommended by the Dust Advisory Committee.

1. New Proposed Respirable Dust Sampling Program

In order to improve miner confidence in the respirable dust sampling program, the proposed rule revises the existing operator sampling requirements for underground mines and for part 90 miners under 30 CFR parts 70 and 90, respectively, and provides that MSHA conduct compliance and abatement sampling.

This proposed rule would result in fewer shifts being sampled than under existing requirements. However, MSHA believes that the amount of sampling it will conduct under the proposed rule will be more protective because a greater number of individual compliance determinations would be made. MSHA samples the Designated Occupation (DO) and at least four other occupations, if available, on each sampling inspection. Also, since all MSHA sampling is unannounced, sampling will occur under conditions that are more typical of the actual mining environment. In addition, compliance determinations would be based solely on a single-sample measurement and not on an average of multiple shift measurements. Multiple shift measurements can mask overexposures by diluting a measurement of high dust exposure with lower measurements made on different shifts or at different occupational locations.

Commenters to the July 7, 2000 proposed rule also criticized MSHA for failing to fully incorporate the preamble discussion on the Agency's sampling procedures into the proposed regulation to prevent those procedures from being changed or modified in the future. MSHA does not believe that it would be appropriate to incorporate agency enforcement procedures into rules that are designed to regulate the mining industry. It is necessary for MSHA to retain the ability to modify its enforcement policies and procedures in response to, among other things, case law, new health or safety concerns, major mine emergencies, or changes in technology which may require the agency to redirect its efforts to protect miner health and safety.

In order to provide the mining community with an understanding of how the agency intends to enforce this proposed rule, MSHA has published a draft of Chapter 1 (Respirable Dust) of MSHA's health inspection procedures (see <http://www.msha.gov>) which it intends to adopt as its enforcement strategy when the final rule becomes effective.

2. Verification of Ventilation Plan Effectiveness

The proposed rule requires that each underground coal mine operator must have a mine ventilation plan verified by operator sampling. The verified plan must be effective in controlling respirable dust in each MMU under typical mining conditions prior to approval of the plan by the district manager. In addition, mine operators would be required to sample quarterly each producing MMU designated by MSHA to determine if the dust control measures specified in the approved ventilation plan, continue to protect miners from overexposure. No citations would be issued to mine operators based on the results of this sampling as long as the operator takes steps to eliminate the conditions which caused any overexposure identified through such sampling.

Consistent with the Mine Act and its implementing regulations, this proposed rule preserves the primacy of engineering controls to the extent that they are technologically and economically feasible.

The dust control parameters specified in the mine ventilation plans should be designed to control respirable dust and prevent overexposures on individual shifts. These plans should accurately reflect the engineering or environmental controls that are suitable to the mining system and operating conditions at the MMU.

Under the proposed rule, the mine operator will collect respirable dust samples to demonstrate the adequacy of the dust control parameters specified in the mine ventilation plan in maintaining the concentration of respirable coal mine and quartz dust at or below the "verification limits" of 2.0 mg/m³ and 100 µg/m³, respectively. The adequacy of the dust control parameters must be demonstrated on shifts during which the amount of material produced is at or above the "verification production level" (VPL) or the tenth highest production level recorded in the most recent 30 production shifts, and using only the engineering or environmental control parameters proposed in the ventilation plan, at levels not exceeding 115 percent of the quantities specified in the plan.

The proposed rule would require mine operators to: (a) Set and maintain the dust control parameters during verification sampling at levels specified in the plan; (b) maintain and make available to MSHA records of the amount of material produced by each mechanized mining unit during each production shift; (c) provide additional