

applicable dust standard, the mine operator will be notified to revise the dust-control portion of the mine ventilation plan as specified in this Part.

When MSHA samples a MMU for abatement purposes, single samples will be collected from the working environment of the cited occupation and, if available, four other occupations that will include the DO. Like compliance sampling, abatement sampling will be conducted portal to portal, for the entire shift or 8 hours, which ever is less.

When sampling DAs and outby occupations, MSHA will collect a similar single-shift abatement sample from the environment of the cited DA or occupation.

A citation for excessive dust will be terminated when all valid abatement samples collected are at or below the applicable dust standard. The subsequent action form will clearly and fully describe the action taken to abate the violation. Mine operators may be required to revise the ventilation plan in accordance with § 75.370(a)(2) of this title depending on the type of corrective measures taken to abate the violation. This includes, at a minimum, the actual dust control parameters that were in effect when MSHA sampled.

If the district manager requires the mine operator to initiate the plan verification process under § 70.206 of this part instead of abatement sampling, the citation for excessive dust will be terminated after a revised plan has been verified to be effective for the current mining conditions.

#### (c) Operator Verification Sampling and Quarterly Sampling

Mine operators are required, under this proposed rule, to verify, through sampling, the effectiveness of the dust control parameters for each MMU prior to receiving MSHA approval of the mine ventilation plan. In addition, certain mine operators must sample quarterly each DO, any occupation required to wear a PAPR or using administrative controls, and any other occupation designated by the district manager. The purpose of the quarterly sampling is to evaluate the continued effectiveness of the approved dust control parameters. These provisions are discussed elsewhere in this proposed rule.

#### (d) Advantages of MSHA Compliance Sampling Over the Existing Program

Under section 101(a)(9) of the Mine Act, no health standard promulgated under the Act shall reduce the protection afforded miners by an existing mandatory health standard. The joint promulgation of this proposed rule

and the proposed single sample rule, would provide protection to miners from the debilitating effects of occupational respiratory disease by limiting their exposures to respirable coal mine dust and quartz dust on every shift:

- Providing and maintaining a work environment free of excessive levels of respirable dust is essential for long-term health protection. While monitoring of the work environment provides an indication of how effective the existing dust control measures are, monitoring alone does not control dust levels.

Requiring mine operators to implement and maintain dust control parameters which have been determined effective under typical mining conditions, will provide reasonable assurance that no miner will be overexposed on individual shifts.

- Implementing single-shift sample determinations will more likely detect excessive dust concentrations and thus protect miners. Averaging samples taken on multiple shifts can mask overexposures on individual shifts. Although fewer shifts will be sampled under this proposed rule, MSHA believes the revised sampling methodology will provide a more accurate representation of dust conditions to which miners are exposed.

- Under the existing operator sampling program, only the DO is sampled. Under the new sampling program, MSHA will sample multiple occupations on the same shift. As a result, MSHA will make several times as many compliance determinations as under the previous operator and MSHA sampling programs combined, providing a more comprehensive assessment of dust conditions to which miners are exposed.

- Since MSHA will be conducting all compliance sampling, the Agency will be able to monitor the dust control parameters and work practices in effect during sampling. This will enable MSHA to determine the effectiveness of the mine operator's dust control program.

- Unlike the current sampling program, which allows operators' control over when to sample and under what operating conditions, MSHA's visits for compliance sampling will be unannounced. As a result, all phases of the mining cycle are likely to be sampled eventually (*i.e.*, construction activity, longwall start-up, turning crosscuts, *etc.*), and samples should be more representative of typical mining conditions.

- The miners' representative will have walkaround rights during all MSHA sampling, thereby increasing

miners' confidence in the dust sampling program.

#### *B. Procedures for Setting the Applicable Dust Standard When Quartz Is Present*

##### 1. Proposed Procedures

Consistent with MSHA's proposed rule to assume full responsibility for compliance sampling, the Agency also proposes to rely only on MSHA samples, *i.e.*, compliance or abatement samples, as the basis for setting the applicable dust standard when quartz is present. As discussed below, while today's proposed rule would reduce the burden and cost on mine operators to take and submit optional samples, it would not diminish the advantages afforded operators under the current program. In particular, it continues to consider temporal variability associated with quartz determinations by averaging three MSHA samples collected on different shifts.

MSHA believes that results under this revised process will be more representative of the quartz levels to which miners are exposed. Unlike the current process, which may cause a standard to be set based on the quartz content of an individual MSHA sample, three valid MSHA samples would be used to set a reduced standard under the revised procedures (64 FR 65671).<sup>5</sup> Since, under the rules being proposed today, MSHA intends to frequently sample underground mines and surface mines, MSHA personnel will have no difficulty in collecting the required number of samples to arrive at the average quartz percentage. If initial sampling shows that miners may be exposed to excessive levels of quartz, MSHA intends to sample at a greater frequency to ensure that miners are being protected. This level of sampling should also allay any operator concerns regarding the collection of "misleadingly high" samples during atypical periods. MSHA also intends to begin reporting quartz levels to the nearest tenth of a percent. This will be more protective for the miner than the current truncation of results to a full percentage point.

Under the revised procedures, when an MSHA sample contains more than five percent quartz, the agency will average the percent of quartz present in three most recent MSHA respirable coal mine dust samples to set the applicable

<sup>5</sup> Unlike MSHA's objective in compliance sampling, the objective in measuring quartz content is to establish a reduced standard that will apply to all shifts. This enables an operator to design a ventilation plan that will be protective on every shift. Therefore, it is appropriate to estimate the quartz content by averaging quartz measurements obtained over an extended time period.