

least one measurement exceeds the 2.33-mg/m³, CTV (the citation value for a 2.0-mg/m³ standard), a citation would be issued for exceeding the applicable dust standard on the shift sampled. Even though two individual measurements (2.41 and 2.34 mg/m³) exceeded the CTV, one of which is the DO, only one citation would be issued. The DO would be identified in the narrative of the citation as the affected working environment, because all occupations were exposed to the same dust-generating source. Since MSHA would assume responsibility for all compliance sampling under this proposed rule, these five occupations would be resampled by federal mine personnel during abatement sampling to verify that the condition causing the excessive dust levels has been corrected if the district manager concluded that a revised plan was not necessary.

Suppose that in the previous example the 2.34-mg/m³ measurement was obtained for a roof bolter, and the MMU was being ventilated using a double-split ventilation system. This means that the roof bolter, working on a separate split of air from that of the continuous miner, is exposed to a different dust generating source than the DO. Therefore, the roof bolter may not be adequately protected by dust controls implemented for the DO. Consequently, two citations would be issued. Since MSHA samples would be used, all dust control parameters and mining activity would be documented on MSHA Form 2000-86. This information would be reviewed by MSHA along with the sample results to determine if the dust control parameters specified in the approved ventilation plan would need to be upgraded.

MSHA believes that, because of the large "margin of error" separating each CTV from the corresponding applicable dust standard, use of the CTV table would provide ample protection against erroneous citations, a concern raised by previous commenters. This matter was fully explored in the analysis published in Appendix C of the February 3, 1998 notice (63 FR 5703-5709). That analysis showed that for exceptionally well-controlled environments, the probability that any given citation is erroneous will be substantially less than 5 percent. The analysis also showed that this probability is even smaller in environments that are not well controlled. Therefore, any citation issued under this proposed rule in accordance with the CTV table would be much more likely the result of excessive dust concentration rather than measurement error. With regard to the risk of erroneous failures to cite, MSHA

concluded that "the probability of erroneously failing to cite a case of noncompliance at a given sampling location is less than 50 percent when the applicable dust standard is exceeded on a significant proportion of shifts at that location" (63 FR 5709).

Furthermore, noncompliance determinations based on the results of single-shift samples would reduce the chances for failure to cite cases of noncompliance. According to the inspector sampling inspections of MMUs conducted between August and December 2001, only 14 MMUs were found to be in violation of the applicable dust standard. These MMUs were cited under the more recent enforcement policy of averaging measurements taken over multiple shifts, compared to 260 MMUs that would have been citable using single-shift measurements in combination with the CTV table. This clearly demonstrates that the proposed enforcement strategy would not compromise miners' health, instead it would have identified 246 additional instances of overexposure. Otherwise, these overexposures would continue to go undetected under the current policy of measurement averaging.

MSHA has also carefully considered suggestions from previous commenters that the Agency cite for noncompliance whenever any single-shift measurement exceeded the applicable dust standard as this would provide greater health protection to the miner. However, MSHA rejected these suggestions because an enforcement action might not be sustained at this level of confidence. The likelihood that a particular measurement exceeds the applicable dust standard, but not the CTV, due to measurement error, can actually exceed the likelihood that the measurement exceeds the standard due to excessive dust concentration. A thorough technical discussion of this issue is provided at 63 FR 5709-5712 (Appendix D of the **Federal Register** notice cited above).

MSHA has concluded that using single-shift measurements for noncompliance determinations in accordance with the CTV table neither increases nor decreases the applicable dust standard. Operators would continue to be required to maintain compliance with the applicable dust standard at all times. Also, the operator's dust control parameters must be verified as adequate to maintain dust concentrations at or below the applicable dust standard on all shifts, not merely at or below the CTV.

As explained in the notice regarding single-shift measurements of respirable

coal mine dust published in today's **Federal Register**, the Mine Act requires MSHA to regulate exposures on each shift. Since MSHA does not track the number of shifts each miner works over a lifetime, MSHA must, protect miners by limiting their exposure on each shift. Furthermore, as explained in Parts VI and VII of today's notice, eliminating overexposures on individual shifts is beneficial to miners' health. For miners working where there is a pattern of recurrent overexposures on individual shifts, eliminating such overexposures is expected over a working lifetime, to significantly reduce the risk of CWP. Therefore, the Secretary has concluded that equivalent dust concentrations should be maintained below the applicable dust standard on each and every shift.

If an operator receives a citation for exceeding the applicable dust standard, proposed paragraphs (b)(1) through (4) would require the operator to take specific actions to immediately protect miners and to prevent them from being overexposed on subsequent shifts within the time period fixed in the citation. First, the operator would continue to make available approved respiratory equipment to affected miners in accordance with existing § 70.300 and encourage their use until the overexposure condition is corrected, unless the cited occupation is already under a PAPR protection program. The operator would then review the dust control parameters in effect to determine the cause of the excessive dust concentration and correct any deficiencies identified to reduce the equivalent concentration to within the applicable dust standard. If the corrective action the operator takes indicates that the dust control parameters originally approved for the MMU may no longer be adequate for the current conditions, the operator should revise the plan parameters.

Since MSHA would be assuming responsibility for all compliance sampling, proposed paragraph (a)(4) would require the operator to notify the district manager in writing or by electronic means, of what those corrective measures are within 24 hours after implementation. This would enable the district manager to determine whether MSHA should schedule sampling to assess the adequacy of the operator's corrective actions or whether to require the operator to initiate verification sampling. This determination would be based on (1) the review of the information the operator provides; (2) the latest MSHA inspection report documenting the measured quantities of the dust control