

use of respiratory protection to comply with the concentration limits, except as specified in an approved extension under § 57.5060(c) and as specified in approved conditions related to inspection, repair, or maintenance activities. Section 57.5060(f) prohibits use of administrative controls to comply with the concentration limits.

MSHA agreed under the DPM settlement agreement to propose a revision of the existing § 57.5060(d) and implement the current hierarchy of controls as adopted in the Agency's other exposure-based health standards for metal and nonmetal mines, and consider requiring application to the Secretary before respirators could be used to comply with the DPM standard. The settlement agreement further specifies that employee rotation would not be allowed as an administrative control for compliance with this standard.

When a miner's exposure exceeds the PEL or the concentration limit, proposed § 57.5060(d) would require that operators reduce the miner's exposure by installing, using and maintaining feasible engineering and administrative controls; except operators would then be prohibited from rotating a miner to meet the DPM limits. Under its current policy, MSHA allows mine operators to abate a citation for an overexposure to airborne contaminants (air quality) by using feasible engineering or administrative controls to reduce the miner's exposure to the contaminant's enforcement level (See MSHA Program Policy Manual, Volume IV, Parts 56 and 57, Subpart D, Section .5001(a)/.5005, 08/30/1990). When controls do not reduce a miner's exposure to the DPM limits, controls are infeasible, or controls do not produce significant reductions in DPM exposures, operators would have to continue to use all feasible controls and supplement them with a respiratory protection program, the details of which are discussed below in this preamble.

Therefore, MSHA is proposing to remove current § 57.5060(e) prohibiting respiratory protection as a method of compliance in the DPM rule, and § 57.5060(f) which prohibits the use of administrative controls for compliance. Administrative controls, however, were uniquely defined in the existing rule as "worker rotation." MSHA has historically considered other types of controls, besides worker rotation, to be administrative controls.

Administrative controls, such as work practice controls, were permitted. In the context of the existing rule, engineering controls were intended to refer to controls that remove the DPM hazard by

applying such methods as substitution, isolation, enclosure, and ventilation.

Work practice controls were referred to as specified changes in the manner work tasks are performed in order to reduce or eliminate a hazard. The Agency strongly believes that these types of administrative controls do not compromise miners' health and safety and would not reduce the level of their protection as provided under the existing final rule. Moreover, mine operators should be given the flexibility to use them to control miners' exposures under a revised DPM rule. Commenters should submit information and supporting data on appropriate administrative controls for a final rule.

At the present time, operators are not required to develop written administrative control procedures, nor a written respiratory protection program when using these control methods to reduce miners' exposures to airborne contaminants in MSHA's air quality standards at 30 CFR 57.5001/57.5005.

In the ANPRM, MSHA asked commenters for information and data on the appropriate role for administrative controls and respirators in underground metal and nonmetal mines in a proposed rule. Most commenters supported removing the prohibition in order to have greater compliance flexibility.

MSHA asked the mining community whether it should require written administrative control procedures when operators are required to use controls to reduce miners' exposures. Commenters were divided on this issue.

MSHA received some objections from the public as to written administrative control strategies. The commenters stated that such a requirement would increase compliance costs and reduce efficiency and personnel availability. Other commenters recommended that MSHA require operators to have written administrative control strategies and post them on the mine's bulletin board. Commenters should submit to MSHA any information on the benefits and cost implications of including in a final rule a requirement to develop written administrative control procedures and post the procedures on the mine's bulletin board.

The proposed changes to § 57.5060(d) described above might appear to alter the way mine operators will be required to control DPM exposures compared to the requirements contained in the existing rule. However, in most cases, the proposed changes and the existing rule impose similar requirements. The mining community will find that these proposed changes are largely intended to simplify understanding of the rule's

requirements for controlling DPM exposures and to reduce unnecessary paperwork.

MSHA would consider an engineering or administrative control to be effective in reducing DPM exposure if credible scientific or engineering studies or analysis using similar diesel equipment operated under similar conditions have demonstrated the capability, either by itself or in combination with other controls, to achieve significant DPM exposure reductions, in either laboratory or field trials. MSHA believes that a 25% or greater reduction in DPM exposure should be considered significant. MSHA, however, requests further comments on what would constitute a significant reduction in a miner's DPM exposure.

MSHA considers an engineering control to be technologically achievable if through reasonable application of existing products, devices, or work methods, with human skills and abilities, a workable engineering control can be applied. The control does not have to be "off the shelf," but it must have a realistic basis in present technical capabilities.

As discussed elsewhere in this preamble (Feasibility), MSHA would consider, for example, a ceramic DPM filter to be a technologically feasible control for a piece of diesel equipment if there was evidence that the filter had been successfully applied to a similar engine subjected to similar operating conditions. The fact that a ceramic DPM filter had not been previously applied to that particular make and model of engine, or to that particular make and model of mining equipment would not, by itself, constitute a basis for determining that the application would be technologically infeasible.

Also, the fact that the duty cycle of a particular piece of mining equipment might not be sufficient for passive controlled regeneration of a ceramic DPM filter would not, by itself, constitute a basis for determining that the application of that filter to that piece of mining equipment is technologically infeasible.

In this example, unless additional substantive information establishing the technological infeasibility of the application is presented, MSHA would consider the filter to be a technologically feasible engineering control. Furthermore, MSHA would consider the filter to be technologically feasible even though a certain amount of applications engineering might be required to produce a workable or optimal system, including the need to re-locate, re-route or otherwise modify exhaust system components to facilitate