Industrial Minerals Association – North America

February 17, 2006

Office of Standards, Regulations
and Variances
Mine Safety and Health Administration
U.S. Department of Labor
Room 2350
1100 Wilson Boulevard
Arlington, VA 22209-3939

Re: Proposed Rule; Diesel Particulate Matter Exposure of Underground Metal and Nonmetal Miners; Limit on Exposure to Diesel Particulate Matter; 30 CFR § 57.5060

RIN: 1219-AB29

Dear Sir or Madam:

The Industrial Minerals Association – North America (IMA-NA) is a trade association representing producers and processors of industrial minerals, as well as equipment manufacturers, railroad and trucking companies, media companies, law firms and consulting professionals that serve the industrial minerals industry. IMA-NA's membership currently includes companies that mine and/or process ball clay, bentonite, borates, feldspar, industrial sand, mica, soda ash, sodium silicate, talc, wollastonite and other minerals. These minerals are the industrial feedstocks for the manufacturing and agricultural industries, providing the raw materials for such essential products as glass, ceramics, paints, plastics, metal castings and fertilizer. Several IMA-NA member companies operate underground nonmetal mines that use diesel-powered equipment and are impacted by the proposed rule. IMA-NA is pleased to offer comments on the proposed rule on their behalf.

Founded in 2002, IMA-NA was not in existence when the Mine Safety and Health Administration (MSHA) issued its January 19, 2001 rule regulating the use of diesel-powered equipment in underground metal and nonmetal mines (66 FR 5706). Nonetheless, IMA-NA has monitored these proceedings closely and participated actively in the Metal and Nonmetal Diesel Partnership (Partnership). The Partnership is comprised of the National Institute for Occupational Safety and Health (NIOSH), industry trade associations, individual mining companies and organized labor. Its primary purpose is to identify technologically and economically feasible controls using

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available technology that can be incorporated into existing diesel-powered equipment in metal and nonmetal mines to reduce diesel particulate matter (DPM) emissions.

IMA-NA and its member companies are committed to protecting miners from safety and health hazards potentially present in the workplace, including any hazards that might be posed by exposure to DPM. To the extent that regulations are necessary to address significant risks presented by these hazards, IMA-NA supports the promulgation of, and full compliance with, validly promulgated rules. Such rules should be based on the best available science and be both technologically and economically feasible. IMA-NA also supports scientific research that will inform and advance safety and health protection afforded to miners in the workplace.

In the above-referenced proposal, MSHA recognizes that the current regulatory scheme governing the use of diesel-powered equipment in underground metal and nonmetal mines is the product of legal settlement negotiations (70 FR 23281). With minor exceptions, there is a consensus supporting the interim rule among not only the litigants that negotiated and entered into the settlements, but also the regulated mining community that seeks to comply with the current interim rule published on June 6, 2005 (70 FR 32868). This current regulatory scheme is extensive, incorporating a permissible exposure limit (PEL) of 308 ug/m^3, and affirmatively addresses such issues as control requirements, prohibitions on the rotation of miners for compliance, compliance determinations, fueling practices, maintenance standards, engines, miner training, exposure monitoring and diesel particulate monitoring. The rule also incorporates MSHA's longstanding hierarchy of controls used for regulating other exposure-based health standards.

Also in the proposal, MSHA recognizes that the application, engineering and related technological issues attending this rule are more complex and extensive than previously thought (70 FR 53283). Experience gained by MSHA, NIOSH and the mining community since promulgation of the January 19, 2001 rule demonstrates that the underground metal and nonmetal mining industry is encountering technological and economic feasibility issues with DPM controls as they strive to reduce exposure levels to and below the interim limit. The January 19, 2001 160 ug/m^3 final limit currently is infeasible and the rulemaking record in this proceeding confirms this conclusion. Among the technological and economic impediments are the diversity of underground metal and nonmetal mines affected by the final DPM concentration limit, the unavailability of a broad array of low-DPM emission engines, active and passive diesel particulate filters that are ineffective or lack mine worthiness in production duty cycles, and the limited availability of alternate and ultra low-sulphur fuels. Given our experience to date, IMA-NA is dubious that the underground metal and nonmetal mining industry as a whole can come into compliance with the 160 ug/m^3 PEL, either as a final limit or under MSHA's proposed staggered phase-in approach, even if individual mine operators are able to file applications for a special extension of time within which to come into compliance.

IMA-NA also questions the validity of the underlying scientific basis for the 160 ug/m^3 final limit. This continues to remain a major unresolved issue for the parties litigating the January 19, 2001 final rule, as well as the regulated mining community as a whole.

There are no established relationships between concentrations of elemental carbon (EC) and total carbon (TC) under various operating conditions (70 FR 53288). The potential for positive interferences from non-diesel carbon contributions in air sample varies from mine to mine as seen by NIOSH studies. MSHA should commission additional research to identify an appropriate conversion factor, if one is possible, with NIOSH recommending methodology for measurement.

Demonstration of significant adverse health effects from exposure to DPM in underground metal and nonmetal mines remains in dispute. In this regard, it is important to recognize that since the mid-1990s NIOSH and the National Cancer Institute (NCI) have been conducting a multi-year, multi-million dollar epidemiological study of underground nonmetal miners exposed to DPM. The NIOSH/NCI study is nearing completion and could serve as the best available scientific evidence for determining quantitative risk estimates for DPM-exposed underground miners. IMA-NA believes that the NIOSH/NCI study should inform any final PEL for DPM ultimately promulgated by MSHA. If and until that time, IMA-NA believes that MSHA should continue to rely on the June 6, 2005 308 ug/m^3 interim limit, in concert with other diesel-related regulatory requirements, as the best means to protect the health of underground metal and nonmetal miners. MSHA acknowledges that the final concentration limit of 160 ug/m^3 may not provide any more protection for miners than the 308 ug/m^3 interim limit (70 FR 73288). Consequently, blind adherence to the 160 ug/m^3 final limit only will result in a regulatory scheme unworkable for all concerned.

An example may be illustrative. To attain compliance with either the interim or final PEL, mine operators must use, install and maintain engineering and administrative controls to the extent feasible. Where these controls do not reduce a miner's exposure to the DPM limit, controls are infeasible, or controls do not produce significant reductions in DPM exposures, mine operators must continue to use all feasible engineering and administrative controls and supplement them with respiratory protection. However, MSHA acknowledges that its current enforcement sampling results indicate that many mining operations have exposures above the 160 ug/m^3 PEL and that the availability of effective control technologies that will reduce exposures to the final limit is speculative at this time (70 FR 53285). With each lower phase-in limit more miners would have to wear respirators for longer periods until controls became feasible. There are legitimate questions about worker acceptance of wholesale respirator use and about mine operators' ability to remain productive. MSHA never has had a health standard that resulted in a significant percentage of the workforce required to wear respiratory protection. Such an outcome would not serve miners, mine operators, or MSHA.

For MSHA to pursue its proposed course or, worse still, to allow the 160 ug/m^3 final limit to take effect immediately, would result in an infeasible rule with which the underground

metal and nonmetal mining industry could not comply, potentially subjecting mines to closure actions and miners to wearing respirators to protect against what many regard as undemonstrated adverse health effects. As a practical matter, this represents a recipe for regulatory disaster.

This scenario can be avoided if MSHA: 1) maintains the 308 ug/m^3 interim PEL until it has the opportunity to publicly evaluate the results of the NIOSH/NCI diesel epidemiological study; 2) permits applications for a special extension of time within which to come into compliance; and 3) enforces compliance with the June 6, 2005 interim rule. At the same time, the Diesel Partnership collaboration should continue to work on identifying controls to limit DPM exposure.

Thank you for this opportunity to submit comments on this matter on behalf of IMA-NA and for your consideration of our views.

Respectfully submitted,

Mark G. Ellis
President