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Mr. Marvin Nichols, Director Office of Standards, Variances and Regulations MSHA 1100 Wilson Boulevard, Room 2350 Arlington, VA 22209

Dear Mr. Nichols:

These comments are submitted on behalf of the members of the National Mining Association (NMA) in response to the limited re-opening of the comment period that appeared in the <u>Federal Register</u> on February 20, 2004 (69 <u>FR</u>, page 7881). We appreciate this opportunity to provide comments and urge the agency to proceed expeditiously to conclude this important regulatory proceeding. Before turning to our comments we want to indicate our support of, and incorporate by reference, the comments submitted on behalf of the MARG Coalition.

Throughout the entirety of this proceeding we have maintained a fundamental position – that the agency should delete the final 160 microgram standard that is to become effective January 2006. We believe that two of the three documents that the agency has submitted to the record through this proceeding provide further foundation for that result and we urge MSHA to complete this rulemaking proceeding as soon as possible, including deletion on the 160 microgram standard.

## Stillwater Study – Phase 1

The first document submitted for the record presents the results of in-mine testing of selected diesel particulate matter (DPM) control technologies at an underground mine. The tests were conducted under the auspices of the Metal/Nonmetal Diesel Partnership, of which NMA is an active and founding member.

Before turning to the specifics of the study we believe it is appropriate to recognize and thank Stillwater Mining and National Institute for Occupational Safety and Health (NIOSH) for their efforts on behalf of the underground metal/nonmetal mining industry. Both Stillwater and NIOSH have committed untold resources to examine technologies to reduce miner's exposure to dpm and their efforts to improve miner's health must be recognized. While all users of underground diesel powered equipment have initiated processes to reduce dpm concentrations, Stillwater's contribution to developing an overall understanding of the difficulties that can be encountered is invaluable. Hopefully, the knowledge gained during the testing at the Nye Mine will enable all parties to understand the delicate balance that must be achieved when attempting to design compliance strategies.

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As reflected in the report, the objective of the Phase 1 study was to determine the "viability of DPF systems and establish confidence in their performance." The study fulfilled this objective as the systems tested did, in the isolated-zone setting that was created for these tests and for the limited equipment that was capable of using the DPF systems for the tests, perform, to some degree, as designed and advertised. It is important to note that the isolated-zone created for these tests is, in the truest sense, an underground laboratory where optimum conditions are created and maintained for the test period. Thus, one can validly question whether the results obtained in the isolated-zone test can be replicated during actual mining conditions. Of equal, if not greater significance, the Phase 1 report documents instances where the DPF systems <u>did not</u> achieve the expected reductions, even when operated in the isolated zone.

As reflected in the introduction of the Final Report, the partnership envisioned a second phase of testing to "assess the effectiveness of diesel particulate filters in controlling the exposure of underground miners in actual production scenarios." Regrettably, the Phase 2 tests and accompanying report were not completed prior to the February 20 publication date of the limited reopening notice. The tests have since been completed and the final report has been delivered to the members of the Partnership and MSHA. We believe the results of the actual in-mine production scenario testing are informative and extremely relevant to the completion of this regulatory proceeding.

Unlike the largely positive results obtained during the isolated zone testing, the Phase 2 production scenario tests highlighted the technologic limitations that mines have and will encounter during DPM reduction efforts in the actual mining cycle. Equipment failures and performance below that obtained during the isolated zone testing, and as advertised by manufacturers, were commonplace and will be repeated as these technologies are deployed throughout the underground metal/nonmetal sector. Indeed, the report notes that:

"... the efficiencies for the DPF systems achieved in the mining studies did not always agree with the efficiencies reported in the laboratory studies. These studies also demonstrated that considerable effort is needed to select and optimize DPF systems for individual underground mining applications."

Moreover, the Phase 2 test was limited, and defined, by those pieces of equipment for which a diesel exhaust filtration system could be retrofitted. Importantly, this category represented only a small fraction of Stillwater's underground diesel fleet leaving the vast majority of the fleet to future controls that have yet to be developed, or to ultimate replacement -- an economic cost that was never envisioned by the DPM rules.

While some of the engineering and technologic limitations may be controllable as mines develop and refine strategies to comply with the interim 400 microgram TC standard (converted to308 EC) they present largely insurmountable obstacles as these same mines struggle to achieve compliance with a final standard that becomes effective in only 18 months. This point was borne out in the Phase 2 test, where even under

optimal conditions, personal samples were well in excess of the 160 TC final limit. ("During tests #2 and #3, when target vehicles were fitted with DPFs ... the results in test #2 were well above the final DPM exposure limit") see Final Report at 18 (March 26, 2004) For these mines, the necessity to develop compliance strategies has begun and the results from the Phase 2 tests have raised additional hurdles and created additional questions -- for example what technology is appropriate for different engine applications; do DPF's exist for the wide-range of engine horsepower's used in the underground metal and nonmetal sector; and what is the impact of existing and exotic fuel additives on the performance of DPF's .

As we and others have noted in prior filings, Section 101(a)(6)(A) of the Mine Act provides that the Secretary in promulgating mandatory standards shall consider, among other things:

the latest scientific data in the field, the feasibility of the standards, and the experience gained under this and other health and safety laws.

We believe the experience gained in the production zone test at the Nye Mine is extremely relevant to this rulemaking; reflects the "latest scientific data"; speaks to the "feasibility of the standard"; and demonstrates that the final 160 microgram standard is not technologically feasible and should be deleted.

## The Chase Report

Similar to the Stillwater Study, we believe the report by Dr. Gerald Chase, "Characterization of Lung Cancer in Cohort Studies and a NIOSH Study on Health Effects of Diesel Exhaust in Miners", supports deletion the 160 microgram standard.

As the agency is aware, the mining industry has long maintained that MSHA's actions related to regulating DPM exposure in the underground environment should be guided by the results of a multi-year, multi-million dollar study being conducted by the National Cancer Institute and NIOSH. Regrettably, despite our repeated requests, MSHA's previous Assistant Secretary chose not to await the results of this important study even though it is recognized as being the most informative scientific study of the effects of DPM exposure on the very population that the regulations seek to protect.

Since promulgation of the final DPM rule for underground metal/nonmetal mines, the study has advanced and last Fall the first study results were made publicly available. In his analysis of the data made available by the study sponsors Dr. Gerald Chase found that:

the "number and pattern of lung cancer deaths reported ... are in agreement with lung cancer deaths from the general population ... and <u>less than what NIOSH appears to have</u> <u>predicted.</u>" (Emphasis added) The ramifications of Dr. Chase's conclusion cannot, and should not, be ignored.

MSHA's decision to promulgate the DPM standard was premised on two principal health concerns: (1) the transitory, reversible health effects of exposure to dpm; and, (2) the long-term impacts that may result in an excess risk of lung cancer for exposed workers. Dr. Chase's analysis of the limited data that the study sponsors have made available, confirms our earlier concerns questioning the scientific foundation upon which MSHA based the DPM rules and the imposition of a two-phased compliance scheme.

As was the case with our earlier discussion of the Stillwater Study, we call to the agency's attention the requirement of Section 101(a)(6)(A) of the Mine Act that MSHA consider "the latest scientific data in the field" when promulgating a mandatory standard. While we recognize, as we had done in the past, the transitory health effects that may result from exposure to dpm, the analysis conducted by Dr. Chase on the latest miner specific scientific data eliminates the rationale upon which the final 160 microgram standard was premised.

The analysis conducted by Dr. Chase and the Stillwater report lead to the inevitable result that we have long maintained – that there is no scientific or technologic basis for the final 160 microgram standard, and therefore it must be deleted.

## The NIOSH Respirator Report

The final item added to the record through this limited reopening is a report prepared by Bureau of Labor Statistics and Centers for Disease Control and Prevention/ NIOSH, providing the results of a voluntary survey of respirator use and practices in private industry during the period August 2001 – January 2002. The report provides general information on respiratory protection use and practices across all industry, including mining industry. However, the nature of the data -- its voluntary basis, limited validation and lack of detail -- renders the report of no specific utility in this proceeding, beyond providing general support for MSHA's proposal to permit operators to utilize respiratory protection for compliance consistent with current practice.

First and foremost is the voluntary nature of the survey. We are pleased that the report documents that many mining companies make respiratory equipment available to their employees and that the mining industries use of such devices are made based upon accepted standards regarding training, fit testing, etc. This validates our understanding of mining industry use of such devices. Beyond this support for permitting respirator use consistent with existing policy and standards however, we believe that the survey does not support expansion of the existing proposal

The Proposed Rule published on August 13, 2003, of which this limited reopening is a part, was based upon a settlement agreement reached in response to legal challenges to the 2001 Final Rule. The Proposed Rule recognized the traditional and established role that personal protective devices can, and must play, as operators develop strategies to reduce miner's exposure to dpm. We are pleased that the limited voluntary survey, that predates the settlement agreement and Proposed Rule, documents the role that these time-tested devices occupy in protecting miners health.

Thank you for this opportunity to provide these comments.

Sincerely, Bruce Watzman