November 30, 2016

VIA E-MAIL AND HAND DELIVERY

Ms. Sheila McConnell
Director
Office of Standards, Regulations, and Variances
Mine Safety and Health Administration
U.S. Department of Labor
201 12th Street South
Arlington, VA 22202

Re: RIN 1219-AB86; Docket No. MSHA-2014-0031, Request for Information on Exposure of Underground Miners to Diesel Exhaust -- Comments of the Industrial Minerals Association - North America and its Diesel Emissions Task Force

Dear Ms. McConnell:

Please find below and attached the comments of the Industrial Minerals Association-North America ("IMA-NA") and its Diesel Emissions Task Force ("Task Force") on MSHA's Request for Information on Exposure to Diesel Exhaust of Underground Miners ("RFI"). IMA-NA is the representative voice of companies which extract and process a vital and beneficial group of raw materials known as industrial minerals. Industrial minerals are the ingredients for many of the products used in everyday life such as glass, ceramics, paper, plastics, paint and coatings, cosmetics, pharmaceuticals, and laundry detergent. IMA-NA's companies and the people they employ are proud of their industry and the socially responsible methods they use to deliver these beneficial products. Industrial minerals include ball clay, barite, bentonite, borates, calcium carbonate, diatomite, feldspar, industrial sand, kaolin, magnesia, soda ash, talc, and wollastonite. IMA-NA also represents companies that support producers of industrial minerals. The safety and health of our employees are of paramount concern to IMA-NA members.

The Task Force

Most of the IMA-NA underground mining companies producing those minerals participate in the activities of the Task Force, which was organized in 2015 for, among other reasons, to bring to bear the resources of the IMA-NA on the impending RFI. IMA-NA underground producing member companies represented on the Task Force include Carmeuse Lime & Stone, Ciner Resources Corporation, Fairmount Santrol, Huber Carbonates, Imerys,

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Lhoist North America, Mississippi Lime Company, Solvay Chemicals, Tata Chemicals, Tronox Alkali, Vanderbilt Minerals and Unimin Corporation.

At its organizational meeting, the Task Force, which is chaired by Tronox Alkali General Counsel Richard P. Pasquier, developed the following proactive mission statement:

> The mission of the IMA-NA Diesel Emissions Task Force is to function as a forum for mine operators to learn as much as possible about the health effects of diesel exhaust, especially its carcinogenic potential, to protect IMA-NA members' employees in their occupational settings.

The RFI

The RFI was published in the Federal Register for June 8, 2016 (81 Fed. Reg. 36,826). Comments were requested by September 1, 2016. On June 27, MSHA announced it would hold four "public meetings" on the RFI on July 12, July 21, July 26, and August 4, 2016 in Salt Lake City, UT, Pittsburgh, PA, Arlington, VA (MSHA Headquarters), and Birmingham, AL, respectively. *See* 81 Fed. Reg. 41,487. Representatives of the Task Force presented at the July 26 Arlington, VA public meeting. **The transcript of that public meeting is attached (IMA-NA Attachment 1)**. These comments will address those presentations later in this letter.

RFI Background

As the Task Force and other stakeholders began analyzing the RFI, it became very clear that, because of the number, depth, and complexity of the questions posed by it, meaningful responses to those questions would not be able to be formulated by September 1. Thus, to MSHA's credit, in response to a number of requests from stakeholders, including the Task Force, MSHA announced at the public meetings it would extend the comment period, and, then on August 25, the Agency published another notice, this one extending the comment period to November 30. 81 Fed. Reg. 58,424.

In the opinion of the Task Force, the RFI **attached hereto (IMA-NA Attachments 2a, 2b and 2c)** is a remarkable document. Its authors set out a short history of MSHA's regulation of the health effects of diesel exhaust with regard to underground miners in the United States, as well as a brief description of *some* (*but not all*) recent research with regard to these health effects. We shall discuss that research, as well as additional research not mentioned in the RFI, further below. Then, and central to the RFI, it sets forth 28 detailed questions aimed at eliciting comments regarding the use of diesel-powered equipment in underground coal mines and underground metal/nonmetal ("MNM") mines. Our comments are intended to be responsive only to those questions dealing with MNM mines, *i.e.*, questions 14 through 28. Candidly, however, even though MSHA has extended the comment period until today, the Task Force's answers to the questions are not as responsive as MSHA may have hoped they would be. We say that for two key reasons.

First, IMA-NA polled all of its Task Force members seeking responses to Questions 14 through 28. These are the questions relevant to MNM mines. Even though IMA-NA has aggregated its members' responses, those producer members remain concerned that many of these questions seek responses which could contain business-confidential information. Thus, as

you will see in **the third attachment to this letter (IMA-NA Attachment 3),** which is an aggregation of responses received; you may think some of the answers are somewhat vague. That is because we have purposely made them so in order to protect the confidential nature of responses we received.

The second reason why the Task Force's answers to the questions posed cannot be as responsive as MSHA may have wished for is that the Task Force simply does not know the answers to a number of the questions in the RFI. In that respect, and in our desire to bring to bear the resources of the Task Force, other industrial (to include not only other sectors of the mining industry, but also manufacturers of diesel engines and mining equipment) and organized labor stakeholders, as well as MSHA, and (especially) NIOSH, the undersigned and IMA-NA's outside counsel, Ed Green, met with senior executives of NIOSH and MSHA and suggested that we all work together in a "partnership" on the challenging problems posed in the RFI. We shall discuss this "partnership" further below; but for now, suffice it to say, the inaugural meeting of the NIOSH/MSHA Diesel Exhaust Partnership will be held on December 8 in Washington, PA. The Task Force is eager to participate in both that meeting, as well as subsequent Partnership meetings.

In this regard, the Task Force strongly recommends that the comment period on this RFI be extended and kept open indefinitely, in order to allow the proceedings or minutes of the Partnership meetings to be added to this RFI Docket.

Current Regulation of Exposure of MNM Underground Miners to Diesel Exhaust

As noted above, the RFI contains a brief history of MSHA's regulation of the exposure of US underground miners to diesel exhaust.[1] What the RFI fails to mention, however, is that the rulemaking leading to these regulations took years to develop during the 1990s and over the turn of the century. The rulemaking was very contentious, such that the final rules were only promulgated on January 19, 2001 the very last full day of the Administration of President Bill Clinton, as so-called "midnight regulations".[2]

Not only was the rulemaking itself contentious, but these midnight rules were so unsatisfactory that the MNM mining industry promptly challenged the rules in the United States Court of Appeals for the District of Columbia.

The MNM petitioners also approached the transition team of incoming President George W. Bush to describe the grievances they held about these regulations (hereinafter the "DPM Rules"). A multi-year settlement discussion then ensued resulting in a number of significant changes to the DPM Rules (as can be seen in the description of the DPM Rules in the RFI). Not all issues were settled, however; and ultimately, the case against the DPM Rules was presented

[1] RFI at 36,828.

[2] 66 Fed. Reg. 5,104.

to a three-judge panel of the Court of Appeals, and a decision was rendered in 2007, upholding the DPM Rules.[3]

The DPM Rules can be found at 57 C.F.R. §§57.5060 through 57.5075. They are stringent, covering the use of diesel-powered equipment pretty much from "soup to nuts." They cover—

- a limit on exposure of underground MNM miners to DPM;
- compliance determinations;
- fueling practices;
- maintenance standards;
- engines;
- miner training;
- exposure monitoring; and
- diesel particulate records.

In addition, the "engines" requirements also mandate engines to be approved by MSHA either under the provisions of Subpart E of 30 C.F.R. Part 7 or Part 36, as may be applicable. **Copies of all of these MSHA rules are attached to this letter (IMA-NA Attachments 4a, 4b and 4c)**.

The DPM Rules have now essentially been in effect for almost 15 years. Initially MNM operators, including Task Force members, had significant problems complying with the DPM Rules, especially the limit on exposure of underground miners to DPM. Exhaust filters and alternative fuels such as biofuels were only emerging technologies in 2001, and it took several years for all stakeholders to gain experience, through trial and error, until parties gained confidence in their use. Thus, the Task Force is very pleased to see that, based on MSHA's analysis of its own inspectors' sampling from 2006 to 2015, the average DPM exposures of MNM underground miners have decreased by 57 percent.[4] Being mindful that the current DPM exposure limit is 160 micrograms of total carbon per cubic meter of air, the RFI notes that further analysis showed that 63 percent of the MNM mines sampled had average exposures below 100 micrograms of total carbon per cubic meter of air; and 75 percent had average exposures below 122 micrograms of total carbon per cubic meter of air.[5] Overall, according to the RFI, 50

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[3] *Kennecott Greens Creek Mining Co. v MSHA*, 476 F. 3d 946 (D.C. Cir. 2007).

[4] RFI at 36,831.

[5] *Id.*

percent of the mines sampled had average exposures between 48 and 122 micrograms of total carbon per cubic meter of air.[6]

Simply put, these are remarkable achievements. They show how successful the current DPM Rules have been in protecting underground miners. Candidly, these data call into question the need for this RFI. Having said that, the Task Force is interested in learning as much as possible about the health effects of diesel exhaust in order to make sure we are protecting our miners. Hence we submit these comments and plan to continue an active engagement with MSHA on the RFI. As we discuss further below, the Task Force is especially pleased to work with MSHA and NIOSH (and other stakeholders) in the context of the NIOSH/MSHA Diesel Exhaust Health Effects Partnership.

Recent Research on the Health Effects to MNM Underground Miners to Diesel Exhaust

As noted above, the RFI discusses some recent research on the health effects to MNM underground miners to diesel exhaust. *See* RFI at 36,828-36,829. Specifically, the RFI notes the 2012 National Cancer Institute ("NCI")-NIOSH Diesel Exhaust in Miners Study ("DEMS"). **Copies of DEMS are attached (IMA-NA Attachments 5a, 5b, 5c, 5d, 5e, 5f and 5g).** Several Task Force members were participants in DEMS, as follows: Ciner Resources Corporation (formerly OCI Chemical), Mississippi Lime Company, Tata Chemicals (formerly General Chemical) and Tronox Alkali (formerly FMC Corporation). Thus, the Task Force considers itself uniquely qualified to discuss DEMS.

DEMS has much merit. For example, the size of the study (12,315 miners) is extraordinary. However, DEMS is also flawed, as discussed further below. Furthermore, and very importantly, DEMS is backward looking—almost a snap shot in time—depicting exposures from diesel-powered fleets ending in the early 1990s. These fleets have been largely replaced or overhauled such that in 2016, the Task Force knows that the fleets at Task Force DEMS mines are much newer with cleaner emissions than the fleets at Task Force DEMS mines in the early 1990s.

As for the Health Effects Institute ("HEI") November 2015 Special Report 19, "Diesel Emissions and Lung Cancer: An Evaluation of Recent Epidemiological Evidence for Quantitative Risk Assessment," **a copy of which is attached (IMA-NA Attachment 6),** the Task Force is disappointed that we must advise MSHA we believe it is flawed. For example, and very notably, in spite of an invitation by Fred von Ahrens, the General Manager of Task Force Member Tronox Alkali's Westvaco Mine in Green River, WY, to tour the mine, HEI President Daniel Greenbaum and HEI Diesel Epidemiology Panel Chair Daniel Krewski chose not to accept this invitation. The Task Force finds it peculiar, indeed, for this invitation to have been rejected, especially since: (1) none of the HEI Diesel Epidemiology Panel members are knowledgeable about mining; and (2) as far as the Task Force knows, neither Mr. Greenbaum nor any of the Panel members had ever even traveled in an underground mine using diesel-powered equipment. Frankly, the Task Force finds it shocking that the HEI could have produced a report assessing the quality of DEMS, with no knowledge of the mining industry. **Copies of**

[6] *Id.*

the von Ahrens correspondence and the Greenbaum reply are attached (IMA-NA Attachments 7a, 7b, 7c, 7d and 7e).

Having expressed our reservations about HEI Special Report 19, the Task Force also wants MSHA to know that we believe HEI has carried out some very important credible work about the health effects of diesel exhaust. Indeed, almost contemporaneously with the release of Special Report 19, HEI released, in December 2105, "The Advanced Collaborative Emissions Study (ACES)". ACES showed that emissions from modern diesel engines demonstrated dramatic improvements and the absence of any significant health effects. These improvements are simply remarkable. The Task Force urges MSHA to take ACES into special account. **Copies of the HEI Press Release and ACES' Executive Summary are attached (IMA-NA Attachments 8a and 8b).**

To assist us in understanding DEMS and the other relevant scientific literature, the Task Force has retained Dr. Roger O. McClellan as a consultant. Dr. McClellan is one of the world's premier experts on the health effects of diesel exhaust. **His biography and curriculum vitae are attached (IMA-NA Attachments 9a and 9b).** Among the tasks assigned to Dr. McClellan was the preparation of a critique of the HEI Report**. That report, entitled, "Critique of Health Effects Institute Special Report 19, 'Diesel Emissions and Lung Cancer: An Evaluation of Recent Epidemiological Evidence for Quantitative Risk Assessment" (November 2015) is attached (IMA-NA Attachment 10).** The Task Force urges MSHA to pay careful attention to Dr. McClellan's Critique. It is a careful analysis of the strengths and weaknesses of DEMS.

For example, in the Abstract of his Critique, Dr. McClellan states as follows:

> In my opinion, even this qualified endorsement of the two studies is not consistent with the substantial uncertainties in estimates of REC [Respirable Elemental Carbon] exposure and the association between diesel exhaust exposure and lung cancer made by the original NIOSH/NCI investigators and those of the independent analysts using alternative estimates of REC exposure, control for radon exposure, and alternative REC exposure-response models.
>
> As expected, analysis of the DEMS nested case-control data reveals a strong influence of cigarette smoking on lung cancer, an influence that makes it challenging to tease out the effects of other risk factors, including diesel exhaust exposure and radon exposure. The new analyses of the DEMS data by independent analysts using new estimates of REC exposure based on HP-CFM showed a reduced risk of REC-associated lung cancer compared to those of the original investigators. Moreover, the new analyses using limited radon measurement in the mines show a clear influence of radon exposure. Based on all of the analyses conducted to date by either the original investigators or independent analysts, it is likely that any estimates of the potency of diesel exhaust from old traditional technology diesel engines (pre-1990) will be bounded on the upper bound by the results of the original analyses of the DEMS nested case-control data and on the lower bound by limited excess risk, as revealed by the independent analyses using the HP-CFM based REC estimates and control for radon exposure.

> The multiple analyses performed to date using the DEMS data set serve as an example of the value of making epidemiological data sets available for replicative and new extended analyses by multiple teams of scientific investigators. Moreover, the results of the multiple analyses emphasize the importance of considering the complete constellation of results to inform public policy decisions on the risks of exposure to diesel exhaust without excessive reliance on the original analyses.
>
> Any use of the DEMS results for either cancer hazard characterization or quantitative risk assessment also needs to recognize the results of such assessments are most relevant to old traditional diesel technology (pre-1990). Substantial changes in diesel technology (engine technology, exhaust after-treatment and ultra-low sulfur fuel) have been made in recent decades such that new technology diesel engines have extraordinarily low emissions of particulate matter and nitrogen oxides. The results of the analyses of DEMS data based on exposure to exhaust from old technology engines have limited relevance to evaluating the health risks of exhaust from the new technology diesel engines.
>
> The cancer hazard findings from analysis of the DEMS data, even if uncertain, underscore the value of past and continuing efforts to reduce the exposure of workers to exhaust from traditional diesel engines. Moreover, the results emphasize the benefits of shifting to new technology diesel engines using ultra-low sulfur fuel with low emissions of particulate matter and oxides of nitrogen.

Critique at 5-6.

> Importantly, in his conclusions, Dr. McClellan states as follows:
>
> The HEI Report provides a blank endorsement of the use of the DEMS data set for quantitative risk assessment while noting the need to consider uncertainties in the data and their results. In this reviewer's opinion, the HEI Report does not adequately consider the implications of the results of the extended analyses conducted by the independent investigators. There is a stark contrast between the findings of Silverman, et al. (2012) and those of Crump, et al. (2016) based on analyses using the same DEMS data and different REC exposure metrics with and without control for radon. Silverman, et al. (2012) report a statistically significant association between exposure to REC and lung cancer for two groups: (a) all subjects; and (b) all subjects who ever worked underground. In contrast, Crump, et al. (2016) found reduced associations between REC and excess lung cancer with the HP-CFM based REC metric analyses conducted with and without control for radon. None of the trend slopes calculated using the new HP-CFM based REC estimates were statistically significant ($P > 0.05$). Moreover, these trend slopes were smaller by roughly factors of five without control for radon and factors of 12 with control for radon exposure compared to those of Silverman, et al. (2012). Also, the 95 percent confidence intervals for the newly derived trend slopes had only minimal overlap with those for the slopes in the original DEMS analyses.

> It is the opinion of this reviewer that any quantitative risk assessment conducted using the DEMS data should consider the full range of potency for diesel exhaust particulate matter identified in the original and extended analyses. This should be the case whether developed to retrospectively to ascribe harm from diesel exhaust exposure to the worker population studied (or other populations with similar exposure) or prospectively to predict or estimate risk for other populations exposed to diesel exhaust.
>
> Further, it should be noted that diesel engine technology, including the fuels used, has constantly changed over the past half century, resulting in continuous reductions in diesel exhaust particulate emissions, and more recently reduced NO_2, and the associated reduced exposure of underground workers. Diesel engines currently marketed with modern control technology have virtually no particulate emissions and very low NO_x emissions (Khalek, et al, 2011, 2015).

Id. 46-47.

The DEMS reanalysis authored by Crump, et al., referenced above, is attached (IMA-NA Attachment 11).

From the perspective of the Task Force, as MSHA continues its consideration of the health effects of diesel exhaust on underground MNM miners, the Task Force urges the agency to examine *all* of the scientific literature. This is not only what we think is a common-sense recommendation, but it is also required by law. Here, the Task Force refers MSHA to Section 101(a)(6)(A) of the Federal Mine Safety and Health Act of 1977, which states, in pertinent part, that when considering the regulation of substances like diesel exhaust, MSHA must consider "the latest scientific data in the field." 30 U.S.C §§ 801, 811(a)(6)(A). The theme of considering all of the scientific literature was emphasized by Dr. McClellan in his statements at the July 26 Public Meeting at MSHA Headquarters in Arlington, VA. It is to that meeting we next turn.

The July 26 Public Meeting at MSHA Headquarters in Arlington, VA

To begin, the Task Force very much appreciates the informal nature of the way the public meeting was conducted by MSHA. We believe this format is very effective in encouraging a fruitful discussion between presenters and the MSHA panelists presiding over the public meeting. **As noted above, the transcript of that meeting is attached**.

Presenting at the meeting in addition to the undersigned were Task Force Chairman Pasquier and Dr. McClellan. In addition to the transcript, **we also attach the statements entered into the Public Meeting by me, Mr. Pasquier, and especially Dr. McClellan (IMA-NA Attachments 12a, 12b, 12c and 12d).** At the outset Mr. Pasquier said Tronox Alkali "support[s] MSHA's desire to evaluate the effectiveness of MSHA's current diesel regulations to ensure that they are protective of employees' health, a value that is the core of our own operations." Transcript at 13-14. Mindful of that fundamental premise to the RFI, Mr. Pasquier went on to say, "But it is critical that MSHA's inquiry be thoroughly grounded in science, meaning that due consideration be given to all of the currently available scientific work, not only the original DEMS papers but also the re-analysis work that has been done with the DEMS

data." Transcript at 14. And importantly, he added "MSHA also must take into account workplace practices and operators' experience in complying with current regulations." *Id.*

The Task Force especially wishes to point out that, in addition to his written statement, Dr. McClellan and Ms. McConnell engaged in an important discussion (akin to a tutorial) on the strengths and weaknesses of DEMS. We appreciate your interest and probing questions. The Task Force also wants to emphasize Dr. McClellan's comments about the HEI Diesel Epidemiology Panel as follows:

> [T]he epidemiological HEI panel individual[ly] and collectively, as they analyzed the reports, I want to emphasize they had limited professional knowledge of underground mining operations and use of diesel equipment in the operations.
>
> One member of the panel is still well-recognized internationally as an expert on diesel emissions. However, he had never been in an underground mine. However, the other panel members had limited professional knowledge of diesel technology, nor had they ever visited an underground mine.
>
> I'm here to tell you that my own personal experience, until you've actually been in different mining operations, you're clueless about how they actually use diesel equipment. I think that was a serious deficiency. I'm disappointed. The HEI panel failed to accept our invitation to visit at least one of the mines.

Transcript at 40-41.

The NIOSH/MSHA Diesel Exhaust Health Effects Partnership

As noted above, the Task Force is very pleased that MSHA and NIOSH have agreed to establish a NIOSH/MSHA Diesel Exhaust Health Effects Partnership (the "Partnership"). **My letter of July 25, 2016 to Assistant Secretary of Labor for Mine Safety and Health Joe Main and NIOSH Director Dr. John Howard is attached. Dr. Howard's reply of August 5, 2016, and Assistant Secretary Main's reply of September 13, 2016, also are attached (IMA-NA Attachments 13a, 13b and 13c).**

We are particularly of the view that this Partnership will be very helpful to MSHA and all other stakeholders in grappling with the RFI's questions; not to mention other questions that we suspect will be identified as the work of the Partnership ensues. MSHA's use of Requests for Information are useful mechanisms for the development of improved safety and health regulations—especially in cases like this RFI that deal with very complex technical issues. The Task Force believes the RFI has truly set the stage for the Partnership to engage with a large audience of expert private sector stakeholders and MSHA and NIOSH experts in an informal iterative process likely to result in a work-product that will provide the basis for any additional regulation (if any) of the exposure of underground MNM miners to diesel exhaust.

We are also pleased that MSHA and NIOSH have scheduled the inaugural meeting of the Partnership expeditiously on December 8. In the separate discussions that Mr. Green and I had with senior NIOSH and MSHA executives this past July, we understood that: (a) the two agencies would draft a protocol or charter for the Partnership, which would then be available for

review and comment by us and other private sector partners before being finalized; and (b) especially from MSHA's point of view, it would be expected the Partnership would be able to develop regulatory recommendations, if any, for consideration by MSHA in around two years from its first meeting next month. That time-line would not affect the life of the Partnership, as we, NIOSH, and MSHA agree, we believe, that the Partnership will likely continue to work on useful research about diesel exhaust health effects.

The Task Force looks forward to participating in the December 8 Partnership meeting, as well as reviewing the draft protocol/charter for the Partnership.

The NIOSH Diesel Exhaust Risk Assessment

The Task Force also wants to inform MSHA that we have been communicating with NIOSH about its decision announced in March 2014 to prepare a diesel exhaust risk assessment ("DERA"). As we understand it, NIOSH's decision to prepare a DERA followed the release of DEMS and the 2012 determination by the International Agency for Research on Cancer ("IARC") that there is sufficient evidence of carcinogenicity in humans from exposure to diesel exhaust to classify diesel exhaust as "carcinogenic to humans." NIOSH's decision to prepare a DERA was announced by the agency's Robert Park at the end of an HEI conference held for the purpose of discussing DEMS on March 26, 2014 in Boston, MA.

Since that announcement, Task Force representatives have been in regular communication with senior NIOSH management to check on the status of the DERA. We understand that it remains in a very preliminary stage. Task Force representatives plan to meet with members of the NIOSH DERA team early next year to introduce the Task Force to the DERA team, and to especially urge the team to visit some of the Task Force's mines so they can see first-hand the operation of our diesel-powered fleets underground.

We want to urge MSHA to pay close attention to NIOSH's work on DERA, as we also intend to do. A properly prepared DERA will be vital for any regulatory outcomes of the RFI and recommendations by the Partnership. Here we note that in its work on the current DPM Rules, MSHA prepared its own lengthy risk assessment. *See* 66 Fed. Reg. 5,752-5,855. Indeed, perhaps one of the seminal issues for consideration by the Partnership will be its role, if any, with the NIOSH DERA team. IMA-NA is also interested to learn what role MSHA contemplates having in work on the DERA.

Conclusions

By way of conclusion, we wish to re-emphasize the following—

- The RFI is a remarkable document. Our answers to Questions 14 through 28 are not as responsive as MSHA may have wished because many of these questions seek business-confidential information and because we simply do not know the answers to some of them.

- The IMA-NA believes that the NIOSH/MSHA Diesel Exhaust Health Effects Partnership will be valuable in bringing to bear the resources of all in the industry

(mining, manufacturers), organized labor, MSHA and NIOSH to work on the challenging questions posed in the RFI.

- In this regard, we strongly recommend that the comment period on the RFI be kept open indefinitely to allow the proceedings/minutes of the Partnership meetings to be added to this docket.

- MSHA data on compliance of the MNM industry with the current DPM rules demonstrates a remarkable achievement, showing how successful these rules have been and calling into serious question the need for this RFI.

- DEMS has much merit; but it is backward looking. The current diesel-powered fleets at Task Force mines are much newer, with cleaner emissions than the fleets at DEMS mines in the early 1990s.

- HEI Special Report 19 is disappointing in that the HEI Diesel Epidemiology Panel never visited any of the DEMS mines (or any other mines) and none of the Panel Members were knowledgeable about mining.

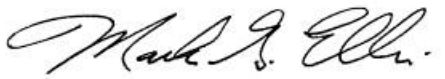
- As demonstrated by the December 2015 HEI ACES report, emissions from modern diesel engines demonstrate dramatic improvements in emissions and the absence of any significant health effects.

- We urge MSHA to consider all of the available scientific evidence, as required by section 101(a)(1)(A) of the Federal Mine Safety and Health Act of 1977.

- MSHA's agreement to participate in a NIOSH/MSHA Diesel Exhaust Health Effects Partnership will go far in meeting this requirement.

Thank you for the opportunity to comment on the RFI. The IMA-NA and the Task Force look forward to working with you further on the RFI, the NIOSH/MSHA Diesel Health Effects Partnership, and the overall questions of health effects of diesel exhaust on underground MNM miners.

Sincerely,



Mark G. Ellis
President
Industrial Minerals Association – North America

Attachments, as stated