

Statement of Bruce Watzman

On behalf of the

National Mining Association

To the

Alpha Foundation for the Improvement

Of Mine Safety and Health

October 10, 2012

Thanks to the Foundation directors for the opportunity to speak today. I am pleased to appear on this panel to share the views of the National Mining Association on the task facing the Foundation directors. The deliberations of the Foundation and the work products that will result will be tangible evidence of the mining community's desire and ability to provide safe and healthy workplaces for the nation's mining workforce.

The Foundation's work presents a unique opportunity to not only bolster our traditional research model for driving improvement in mine safety and health, but to also look beyond that model to examine factors that drive safety performance. Drivers that, heretofore, have been outside the domain of "hard science" research. These drivers include the "soft" topics of safety and health management systems, risk-assessment, leadership, culture and behavior, for example. It is these areas that have the potential to drive continuous improvement using the tools that emanate from the traditional research model that has guided us to date.

During the remainder of today and tomorrow you will hear from experts who share a common goal but bring different perspectives to the goals defined in the Foundations mission statement. The challenge is to choose the right mix and balance of research recognizing that there is no silver bullet to achieve what we all seek – an injury free workplace.

We, like others, recognize the role technology has played in achieving improvements in mining safety and health. But, in our view, technology alone will not be enough to reach the ultimate goal of zero injuries. To that end we also believe we must look beyond the traditional means of accident prevention and disaster response to address other drivers of safety and health performance.

Clearly the actions of mine operators in response to the MINER Act of 2006 and those of MSHA and NIOSH have greatly enhanced emergency response capability. Our continued work in partnership with NIOSH, MSHA, the UMWA and others to develop a next generation self-contained self-rescuers and the anticipated report of the National Academies of Sciences on “Self-Escape Factors during Mine Emergencies” will guide future actions in these important areas of emergency response. Response is important, but prevention merits more comprehensive attention going forward.

As you think about the task ahead I’d ask you to keep in mind the historical cycle of a mining disaster leading to public outrage that it should never be repeated, leading to a technological response and yet another mining disaster leading to more public proclamations that it should never be repeated, more technological response and so on. While we’ve made progress under this model it has not been borne out as an entirely effective

approach when it is applied. That's because technology is only as effective as the context in which it is applied.

If we assessed the root cause of every mining injury or fatality in the U.S. what role would the soft issues such as leadership, culture and behavior, for example, play? They are not part of MSHA's root cause analysis methodology because they are not enforceable. While we call them 'soft', culture, leadership, behavior, risk management and management systems define the likelihood, effectiveness and sustainability of technology being applied appropriately and proactively in a mining organization. Put another way, culture, leadership, behavior, and management systems are the skeleton or frame on which you place technology. They are not only synergistic they are inseparable and today we are only beginning to focus on them across our industry while many others have been studying and focusing on these elements to drive continuous improvement in safety and health performance as well as other functions.

Leadership, culture and assurance are the tenants of the CORESafety safety and health model that that the leadership of the National Mining Association endorsed earlier this year and while researching new technology is important, and I'll speak to that in a moment,

the payoffs are usually years off while enhancing the safety culture of an organization and focusing on how it manages safety and health holds the promise for getting to our shared goal more quickly. Our analysis has shown that those companies considered world class performers in terms of their safety and health performance have moved beyond the programmatic management structure embedded in the MINE Act and MSHA's regulations and are managing safety and health as a system, with defined and measureable inputs and outputs. They view MSHA regulations not as the end-point but rather as the starting point from which they develop integrated management systems. Hard research is important but is only as effective as the context in which it is applied. Effective implementation of the soft research elements enhances the potential for the hard research technology to fulfill its intended objective. Our request is that you dedicate some portion of the Foundation's resources to research that will provide the tools for companies to measure, analyze and enhance the "soft science" issues of safety and health management.

In addition to the above there are identifiable areas where traditional "hard science" research is warranted and necessary. These include underground mine ventilation, dust and ground control. The National Institute for Occupational Safety and Health has robust programs in each of

these disciplines and the Foundation's resources should complement and fill-in the research gaps, not replicate this on-going work.

For example, since approximately 2007 the use of air coursed through a belt entry to ventilate working sections in underground coal mines has been effectively banned. An analysis of the effect of this prohibition on ventilation of longwalls and long pillar panels and the impact of this on dust control is warranted and would be timely.

Similarly, we need to enhance and expedite research on the control of coal and silica dust underground, and especially the role that silica dust plays in health issues especially at low-seam operations. As mining geology becomes more challenging; as mines move into deeper and thinner seams we need to examine how we control miner's exposure to respirable dusts. MSHA and NIOSH's examination and their drawing attention to excess lung disease in certain geographic areas heightens the need and urgency for new, cutting edge research and technology to protect miners health. Our traditional measures of using more air and more water, must be augmented by new technology, engineering, administrative and personal controls to protect miners and the Foundation can serve as the conduit to conduct the research to overcome historic barriers to the use of all such tools.

In the interest of time let me list some additional areas for “hard” research:

- Methods and substances to inhibit combustion propagation;
- Explosion suppression systems, techniques and barriers;
- Examination of the placement of fixed atmospheric monitors;
- Computational fluid dynamics modeling for ventilation planning;
- and
- Predictive ground control technology

In closing let me again thank the Foundation directors for this opportunity. We look forward to working with you in the coming months.