

**Statement of
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Before the
Committee on Education and Labor**

**“Evaluating the Effectiveness of MSHA’s
Mine Safety and Health Programs”**

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Good Morning. My name is Davitt McAteer and I wish to thank you for this opportunity to appear before you today. I am the Vice President of Wheeling Jesuit University where I am responsible for research efforts at the National Technology Transfer Center (NTTC) and Center for Educational Technologies (CET).

In addition, during the past year and one-half, I conducted investigations into the Sago and Aracoma/Alma No. 1 Mine disasters in West Virginia at the request of West Virginia Governor, Joe Manchin, III, and in July and November of 2006, issued reports on those disasters, a copy of each I submit for the record.

From 1994 to 2000, I served as Assistant Secretary of the United States Department of Labor for the Mine Safety and Health Administration (MSHA) and also served as Acting Solicitor for the United States Department of Labor from February, 1996 to December, 1997.

I have been involved in mine safety and health issues since 1968 when, following the Farmington Mine disaster in November of 1968, I conducted a study and produced a report and book entitled Coal Mine Safety and Health – A Case Study of West Virginia.

I come here today to attempt to address questions concerning efforts to improve health and safety in United States for mine workers, but also to propose possible solutions to long standing problems facing the Mine Health and Safety Administration and other regulatory agencies.

Following the disasters of early 2006 – the families of the Sago, Aracoma/Alma and Kentucky, Darby victims, this committee and the American public asked the question of “Why hasn’t the Federal Government acted to bring about changes in the health and safety protections afforded miners, specifically why aren’t new Communication Systems, Seals, Rescue Chambers and improved SCSRs been placed in the mines?”

While the answer is complex, the bottom line is that miners still lack wireless and/or protected phone systems, the 14,000 alternative seals have not been strengthened, rescue chambers are not yet installed in United States mines, increased numbers of improved SCSRs are not yet available to miners and the mine rescue system, although improved, is not equipped as it should be for the 21st Century. We should, however, note that much has been accomplished in terms of

improved training of miners on SCSRs, testing of new communication systems, approval by West Virginia of rescue chambers, monitoring of existing seals, a moratorium on alternative seal construction, and a proposal to strengthen the seals which MSHA's forthcoming Emergency Temporary Standard will address.

Still, those looking beyond the recent tragedies are mystified that MSHA's regulations to protect miners from black lung and silicosis are nearly 30 years old, its exposure limit for asbestos is 20 times less protective than OSHA's standard, and its rules on mine rescue teams are seriously outdated. The list of unfulfilled promises to miners goes on and on.

There are reasons to suggest that in the past, MSHA officials have been unwilling to issue much needed rules, or did not assemble the necessary resources to get the job done in a timely way. Without a doubt, during the past six years the Administration has terminated and cancelled multiple regulatory undertakings (See Attachment 1¹), however, since Sago, Aracoma/Alma, and Kentucky Darby as well as since the passage of the Miner Act and as a result of this Congress's oversight, the agency has stepped up its efforts to promulgate regulations, especially those related to disaster relief.

There is no doubt that an Administration's regulatory philosophy plays an important role in whether regulations are issued and in the type of regulations

¹ Attached Chart prepared under the direction of Suzanne M. Weise and Professor Patrick C. McGinley (West Virginia University College of Law).

pursued. But, that is not the only factor in play; if congressional oversight focuses exclusively on politics, it will miss a tremendous opportunity to address a serious problem that extends beyond the resident of the White House.

As the Assistant Secretary for Mine Safety and Health from 1994 until the end of 2000, I devoted significant agency resources into the development of new MSHA rules to protect miners. I came to the agency with a history of being one of its toughest critics, and I had high expectations in the form of new protective health and safety standards.

From the time I was confirmed by the U.S. Senate (February 1994) until January 19, 2001, there were a dozen or so final rules issued by MSHA.² My predecessor initiated some of these projects (e.g., Hazard Communication; Safety Standards for Explosives at Metal/Non-Metal Mines; First–Aid at Metal/Non-Metal Mines) and we completed them while I was Assistant Secretary. Others were new rules commenced and finalized during my tenure (e.g. Preventing

² Self-contained self-rescuer approval process, joint rule by MSHA and NIOSH, (60 *Federal Register* 30398, June 8, 1995); First-Aid at MNM Mines, (61 *Federal Register* 50432, September 26, 1996); Explosives at MNM Mines, (61 *Federal Register* 36790, July 12, 1996); Safety standards for diesel equipment in coal mines, (61 *Federal Register* 55412, October 25, 1996); Tuition fee waiver at MSHA’s Academy in Beckley, WV, (62 *Federal Register* 60984, November 13, 1997); Civil penalties (63 *Federal Register* 20032, April 22, 1998); Training requirements for experienced miners, (63 *Federal Register* 53750, October 6, 1998); Changes to operator’s daily inspection reports at surface coal mines, (63 *Federal Register* 58612, October 30, 1998); Training for sand, gravel and stone miners (Part 46), (64 *Federal Register* 53080, September 30, 1999); Coal mine ventilation, (64 *Federal Register* 45165, August 19, 1999); Protecting miners from hearing loss, noise standard, (64 *Federal Register* 49548, September 13, 1999); Hazard communication (interim final rule), (65 *Federal Register* 59048, October 3, 2000); Diesel particulate matter protection for coal miners, (66 *Federal Register* 5526, January 19, 2001); Diesel particulate matter protection for metal and nonmetal miners, (66 *Federal Register* 5706, January 19, 2001)

Hearing Loss/Noise Standard; Safety Standards for Underground Coal Mine Ventilation; Training for Stone, Sand and Gravel Miners/Part 46). A team of talented MSHA engineers, industrial hygienists and analysts, would be pulled together to work on each new rule, and typically this assignment was in addition to their regular duties in an MSHA field office. These skilled and determined individuals worked diligently to develop sound, evidence-based and cost-effective regulations designed to prevent miners from suffering injuries, illnesses and death. Despite my determination to issue protective rules and the devotion of MSHA's staff, I am only modestly satisfied with the number of regulatory improvements made during my tenure. In our case, the fault does not lie with the Agency's lack of commitment to miners' health and safety, or an unwillingness to regulate.

MSHA is a small agency within a large federal bureaucracy. MSHA's mission is only one of many within the Department of Labor, and the highest priorities of MSHA's Assistant Secretary may just be one of many for the Secretary of Labor. MSHA is not an independent agency, and it does not operate in a vacuum. But let us put this regulatory promulgation problem into context – this is not just a problem for this Administration. It was a problem when I was Acting Solicitor and Assistant Secretary for MSHA and it will be a problem for next Administrations to come.

During my tenure, we found similar obstacles and road blocks, some of which were the Administration's own making, some created by the Federal Courts and some created by my fellow lawyers exploiting the regulatory system and Federal Courts.

In the best of circumstances, promulgating a new health or safety standard takes 2-3 years to complete. However, when the rule was substantial and/or controversial, it can take 4, 6, 8 or more years from start to finish. In the worst of cases, the procedural maneuvering completely obstructs the process, and those rules are never completed. This "unfinished business" of protecting workers' health and safety is the result of a broken rulemaking system. Equally troubling was this Administration's decision mentioned above to drop about a dozen regulatory projects that were in the queue, including important rules on SCSRs, mine rescue teams, and black lung prevention.

As currently structured, MSHA's system (like OSHA's) is unable to address, in a timely manner, long-standing hazards faced by workers let alone new emerging risks. The public policy considerations embodied in the Federal Administrative Procedure Act, Presidential Executive Order 12866, the Paperwork Reduction Act of 1995, the Information Quality Act of 2001, and their

amendments and implementation documents³ as well as other requirements have suffocated the public health and precautionary values embodied in the statutes governing, among others, MSHA⁴ and OSHA⁵. The harsh reality is that those interest groups, which have a stake in avoiding or postponing new workplace rules, have the financial resources and political clout to impede and/or bog down the current rulemaking system. There are numerous examples of this in MSHA's history, but one of the most troubling to me is the mining industry's efforts to obstruct MSHA's efforts to correct a deadly flaw in the manner in which miners' exposure to coal mine dust is measured.

When I was Assistant Secretary, one of my highest priorities was transforming MSHA's regulations on coal mine dust to eliminate black lung disease once and for all for U.S. coal miners. Our efforts were wide-ranging and comprehensive and some required changes in long-standing regulations. One of the keys to the effort was dismantling a dust monitoring scheme put in place by the U.S. Bureau of Mines (BOM) in 1971, which mandated that miners' exposure to coal mine dust would be calculated as the average of multiple samples. In order for an MSHA inspector to issue a citation for excessive coal mine dust, the average of the samples has to exceed the exposure limit, plus an error factor.

³ E.g. Presidential Review of Agency Rulemaking by OIRA (September 2001); OMB Circular A-4, New Guidelines for the Conduct of Regulatory Analysis (March 2004); OMB's Benefit-Cost Methods and Lifesaving Rule (May 2003); Information Quality Bulletin for Peer Review (December 2004); OMB Bulletin for Good Guidance Practices (January 2007)

⁴ Federal Mine Safety and Health Act of 1977

⁵ Occupational Safety and Health Act of 1970.

As is well known, the average of multiple data points does not accurately reflect the value of any one of the individual data points. Likewise, when you have two or three dusty jobs in a coal mine (e.g., roof bolters, continuous miner operator) and you average these workers' dust exposure samples with samples collected from less-dusty jobs, more times than not, the average will be less than the permissible exposure limit. The result: the mine operator does not receive an MSHA citation, and MSHA cannot compel the mine operator to correct the respirable dust problem, leaving miners, in particular a subgroup of miners, exposed to elevated levels of deadly coal dust.

Beginning in 1991, MSHA attempted to change its enforcement policy to eliminate the averaging of dust samples. After an unfavorable decision by the Federal Mine Safety and Health Review Commission, MSHA and NIOSH jointly engaged in a notice-and-comment rulemaking to revoke officially the BOM's 1971 "sample averaging" policy, and provide miners the health protection afforded by a single-shift dust sample.^{6,7} In addition, an Advisory Committee of industry, labor, public health scientists and academics was constituted in November 1995 and issued its report and recommendations in November 1996. After a lengthy public comment period, which was reopened several times, and multiple public hearings,

⁶ MSHA noted that single-shift air samples are part of standard industrial hygiene practice and the air monitoring approach used for all other workplace air contaminants sample by MSHA and OSHA. This anomaly of "averaging samples" only exists at U.S. coal mines.

⁷ The proposed rule was published on February 18, 1994 (59 *Federal Register* 8357).

a rule revoking the “averaging” policy was published in early February 1998,⁸ after a 4-year public process. The mining industry challenged the rule,⁹ arguing on procedural grounds that MSHA failed to conduct a proper rulemaking. In September 1998 the U.S. Court of Appeals for the 11th Circuit ruled in favor of the mining industry, and we were forced to begin the rulemaking process again. To this day, the rule remains as it was since 1971, in effect exposing a known set of miners to dust levels which we know will result in black lung disease.

As part of this comprehensive effort, we pursued with NIOSH, the development and testing of a continuous dust monitoring system. That effort allowed the introduction in several coal mines the initial, first-generation machine-mounted continuous dust monitor, which proved the concept that real-time continuous dust sampling was possible. These in-mine tests led to the development of the second and now third generations of continuous dust monitors, which are person-wearable units. Tragically, this equipment has not yet been mandated or implemented into U.S. coal mines. While black lung disease has been virtually eliminated in Australia, a recent NIOSH analysis points to the ongoing incidence of new cases of coal workers pneumoconiosis among U.S. miners.¹⁰

⁸ The final rule was published on February 3, 1998 (63 *Federal Register* 5687)

⁹ That is, the National Mining Association and the Alabama Coal Association.

¹⁰ Centers for Disease Control and Prevention. *Advanced Cases of Coal Workers' Pneumoconiosis --- Two Counties, Virginia, 2006*, 55(33): 909-913, (August 25, 2006).

We have the knowledge of how to eliminate it. We have the means to eliminate it. What is lacking is the will at both the governmental and industry levels. It is a shame on the mining industry and on the United States' mining community that we have not eliminated black lung disease.

MSHA, like its sister-agency OSHA, finds itself hidebound by a multi-layered system which slows the process, and thus, the implementation of much-needed worker protections. Agency staff and senior officials in MSHA, and indeed miners and mine operators themselves, know of longstanding hazards faced today by mine workers that are causing injuries, illnesses and death for which remedies exist. In fact many of the hazards encountered by miners today, are not new, some are the same hazards faced by their fathers and even grandfathers. More troubling, is that for many, if not all of these dangers, a remedy exists to reduce or eliminate miners' risk of harm, but is not being put in place.

The mechanical and procedural requirements relating to dates of publication, public comments, record opening, request for additional time for public comment, etc. add months to the process. This is not to suggest that each of the notice and public hearing requirements are lacking in merit or not worthwhile; the facts are that the system has become overloaded. The search for alternative ways to eliminate these risks and dangers must be expanded.

Two alternatives contained in the Mine Act “negotiated regulations” and “advisory committees” have generally failed. Negotiated regulations have proven to be, almost without exception, an ineffective path to successful rulemaking in large part because they can be stopped at any step of the process by any involved party. Objections sometimes come after years of effort, meaning one interest group, either industry or labor, can torpedo the whole effort.

The Act also contains an “advisory” committee option which because of the two tiered requirements, first requiring equal membership of labor and industry, plus a requirement that a majority of committee members be unrelated economically to the mining industry, has proved not only difficult to fulfill but has resulted in a near impossibility to create a committee which can successfully report out an agreed upon set of recommendations. Even when a committee can agree on recommendations, MSHA must still then proceed with the normal rulemaking process.

But let us turn to examples of known safety and health risks which we can virtually all agree are causing death, injury and illness for miners. These are problems for which solutions or answers exist, but which, because of the cumbersome regulatory process or interest group opposition slows the promulgation of regulatory remedies. We rarely create a new way to kill miners, and in the following three examples, solutions have existed for years but the

Federal government has been unable to promulgate protective new rules: 1.

Proximity detectors can automatically turn off remote-controlled mining equipment when it gets too close to miners. The problem of putting mining equipment operators under unstable roof was solved by allowing them to operate the equipment remotely. Currently a number of equipment operators are killed every year when they are crushed by moving equipment underground. Yet despite the fact that devices exist which prevent these deaths, they are not in wide spread use in mines and no regulations have been promulgated requiring their use.

2. Hardened cabs on bulldozers that are used on surge piles can save lives. When a bulldozer falls into a void on a surge pile, the bulldozer and the miner operating the dozer are covered over with the coal or ore. It can take hours to remove the equipment and operator from the surge pile, but if the windows on the dozer don't break and the miner has enough oxygen inside the cab, he can survive. Every year, there are documented lives saved using this technology, but it is not required by regulation. A number of companies have installed this equipment but a significant portion of the industry has not retrofitted their cab windshields to strengthen them.

3. Back-up cameras on trucks and haulage vehicles at large surface mines can save lives of miners who otherwise are at risk of being crushed when the big trucks back up over miners or smaller trucks. These large haulage trucks cost a

fortune, but inexpensive camera systems which are currently available, are not required by MSHA. In the late 90s, I initiated a voluntary program to encourage operators to install them, and sadly that program has languished in the last several years.

Because of the recent mining tragedies, disaster-related regulations have been placed front and center and correctly so. However, this emphasis insures that the hazards described in the three examples above will not be addressed and more miners will needlessly perish from well-recognized hazards. I propose the following shift in regulatory philosophy with respect to mine safety and health problems and solutions.

The critical point is that the regulatory process is broken and cannot be relied on to quickly address real needs for improvements and fast moving changes in the modern workplace. Congress and the regulatory agencies themselves, under the current regulatory framework, cannot efficiently legislate or request solutions to every one of these workplace hazards – issue by issue. We need to find a new approach to protecting miners’ health and safety. Below I have outlined four steps to achieve this new approach.

First, we need a full public analysis of accident, injuries, illnesses, and near misses, and possible solutions. If you will, a National Report to Congress on Health & Safety, and Best Practices. The Report will annually assess how MSHA,

as well as other agencies, are doing in achieving their core mission of saving lives and preventing injuries and illnesses, such as in the case of MSHA and OSHA, or improving environmental quality, in the case of the EPA. This Report would also describe Best Practices in a particular industry, that is, what is being done right, as well as deficiencies.

These best practices then would become the norm to help establish the “Duty of Care” against which an individual company’s efforts would be judged. Even absent a specific regulatory requirement, mine operators would be “on notice” that protections exist and are available, and they have a duty to act, whether or not a specific regulation is in place.

The federal agencies themselves are in the best position to assemble and analyze the data and should be held accountable for what they do with it. It may be that some things are appropriate for a general regulation and this Report would be invaluable in setting priorities. Congressional oversight and public scrutiny is the key. Thus, some issues can be addressed through existing mechanisms like our powerful private insurance system and traditional methods of corporate accountability. And the power of Congress and the press should not be overlooked as another means to effect change, but a yardstick is necessary to measure performance and the annual Report would give us a yardstick based on factual data and the analysis of trends.

Secondly, the current regulatory scheme should be blended with the establishment of a Duty of Care responsibility on the part of each operator. Broadly stated, the duty of care requires a risk management approach on the part of each mine manager, including a thorough process of hazard identification, risk assessment and risk control.

This duty of care approach should be coupled with regulations, not a replacement of the regulatory scheme. This model has been successfully adopted in several countries including Australia and Canada.

At my request and as part of the Sago mine disaster investigation, a memorandum entitled “Thinking Out-Side-The Box: The Proposed Blended Duty of Care and Safety Case Model for Regulation in the Coal mining Industry of Australia” was prepared by Suzanne M. Weise, Esquire and Professor Patrick C. McGinley (West Virginia University College of Law), which I submit for the record (See Attachment 2).

This Memorandum describes the generally applicable “duty of care” standard of Australian law and a proposal to amend to the existing coal mine safety regulatory regime a “safety case” approach found to be successful when applied occupational health and safety regulation of other industries in Australia. Relevant to the post-Sago search for ways to improve mine safety is the active

involvement of mine managers in developing mine-site specific approaches to reduction of health and safety hazards.

The Memorandum concludes that in light of the criticism of post-Sago regulatory and administrative proposals addressing perceived shortcomings of the existing statutory and regulatory regime, critics and regulatory change proponents should welcome the opportunity to review and critique out-side-the-box approaches. The duty of care/safety case regime has been successfully utilized in Australia to address workplace health and safety issues relating to hazardous waste and off-shore petroleum industries. Australian authorities are examining the safety case approach to determine its potential applicability to that nation's coal mines. The safety case approach is one way that site-specific considerations may be given appropriate attention as critics of post-Sago remedial proposals demand. At the very least, those critics and other interested parties should begin to explore new approaches to protect the health and safety of the nation's miners.

As the Memorandum indicates, a duty of care model might have limited application in the United States, especially given the differences in production and number of mines in operation (i.e., Australia with 100,000,000 tons of coal produced annually v. the United States, with 1.2 billion tons produced) but some model which mandates operators to actually engage in the identification of risks

and the elimination of them, as part of their ongoing mining responsibilities. These risk assessment requirements would be in addition to the safety and health regulations required of industry by federal and state agencies. The establishment of legal responsibility for the failure to comply with the “duty of care” might help resolve the “thorny regulatory issues which tend to be frozen by ossified conventional analysis.”¹¹

The outcome at Sago might have been significantly different if the operator viewed it as his responsibility for managing what was going on behind the seals, rather than the “seal it and forget it” approach which ICG management followed.

Moreover a third solution is to shift responsibility for incorporating safety and health remedies into the production cycle, that is, away from the regulatory agencies and onto the mine machinery manufacturers. This is akin to requirements for the installation of safety equipment on automobiles is part of the automobile manufacturers’ responsibility, and not the responsibility of the automobile driver.

For example, longwall mining machines cost in excess of \$50 million and are unparalleled in their ability to mine millions of tons of coal. Yet, few if any, safety and health features are designed into this equipment. There are no locations

¹¹ “Thinking Out-Side-The Box: The Proposed Blended Duty of Care and Safety Case Model for Regulation in the Coal Mining Industry of Australia.” Memorandum prepared at the request of J. Davitt McAteer, Special Advisor to West Virginia Governor, Joe Manchin, III, for the Sago Mine disaster investigation by Suzanne M. Weise, Esquire and Professor Patrick C. McGinley (West Virginia University College of Law).

to store self- rescuers (SCSRs) but instead, miners continue to have to strap these bulky boxes onto their belts. Likewise, and perhaps most disastrously, this longwall equipment is not engineered or designed to capture the tons of coal dust created as an integral part of this high speed powerful cutting machine. Instead, miners who are stationed along the 100+ yards of the longwall machine are inhaling coal dust, after the fact efforts to control the dust with water sprays and shields are only partially effective at best. Moreover, there is significant lost energy as the coal dust is blown into the mined out workings. A vacuum system which captures the coal dust could both capture that energy (the coal dust), and dramatically reduce miner's risk of developing black lung and of a coal-mine dust explosion.

Similarly proximity detectors are not being built into mining equipment purchased today by mine operators. Video cameras providing side and rear viewing for haulage truck drivers sitting 25 feet off the ground, are not standard on all equipment, nor are harden cabs with air supply systems. Despite being technologically available, these common sense protections are not designed into new pieces of equipment sold to the mining industry.

The development of health and safety equipment used by the mining industry has been historically on a separate design and marketing track from coal production equipment. Over the decades, the approach has been to add protections

and safeguards to the miners --- and often as stop gaps to the hazards, such as respirators, hearing protectors, and SCSRs, etc. --- rather than to eliminate the problem and make the protection part of the production equipment. This disjointed approach, which segregates development of the production equipment from the installation of safety and health equipment, must change.

Fourth, innovative ways to regulate must be explored. Simplified quasi requirements agreed upon by all the parties could be made part of the duty of care model and failure to comply would open the operator to litigation if he/she failed to adopt the industry adopted preventative methods and norms.

Moreover, Congress could follow the model adopted in the landmark 1969 Coal Act, and instruct the industry directly on what is expected for miners' safety and health in the law, rather than directing MSHA to regulate. In a regulatory system that is broken and incapable of rapidly and effectively addressing the many hazards still faced by U.S. miners, direct Congressional intervention such as was done in 1969 in adopting dust standards at 2.0 mg^3 , may be justified, and would not be unprecedented.

Finally, industry is not prohibited from adopting voluntary standards and joining in voluntary education and training efforts. Two models which we undertook included: a Comprehension Dust and Noise Training and Sampling Program for stone, sand and gravel operations, and the national campaign to

eliminate silicosis. Under existing Metal/Non-Metal Mine regulations, operators are required to monitor levels of air contaminants and noise, as frequently as necessary, to ensure that their engineering controls are working properly. At these kinds of miners, many mine operators do not routinely conduct this monitoring, but instead rely on , MSHA inspectors, who make inspections twice a year, to monitoring the dust and noise at their workplaces. In essence, some operators rely on MSHA to be their industrial hygienist, although MSHA is only on-site twice per year.

Under an agreement signed with the National Stone, Sand and Gravel Association, MSHA provided used dust- and noise-monitoring equipment to mine operators, and provided multi-day training to miners or supervisors so that these small operations would conduct their own exposures samples for these two health hazards. By learning to monitoring the mine environment as part of their routine production cycle, these miners and operators could assess for themselves whether their engineering controls were working properly.

The second example was MSHA's national campaign to eliminate silicosis. It involved the identification of a problem (i.e., excess exposure to respirable crystalline silica) especially in Metal/Non Metal mines; education - providing information on the need for having and maintaining effective dust controls; and enforcement targeted to the training, controls and most importantly, levels of

exposure. This comprehensive model involved both industry and labor and was successful, at least during my tenure, on highlighting the risks from silicosis.

The changes proposed here would, if adopted in part, address the risks identified at the Sago, Aracoma/Alma, and Kentucky Darby mines and would hopefully protect miners from the types of disastrous consequences which occurred in 2006. But they would also address the long term problems which have hampered the agency from addressing ongoing existing problems.

Finally, these changes could help reestablish the United States as the safest mining industry in the world.