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December 15, 2015

Ms. Sheila McConnell
Acting Director
Office of Standard, Variances and Regulations
Mine Safety and Health Administration
201 12th Street South
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Arlington, VA 22209-3939

**RE: COMMENTS OF BHP BILLITON SAN JUAN COAL COMPANY,
PACIFICORP'S INTERWEST MINING COMPANY, AND THE
BITUMINOUS COAL OPERATORS' ASSOCIATION ON MSHA'S
PROPOSED RULE RE PROXIMITY DETECTION SYSTEMS FOR
MOBILE MACHINES IN UNDERGROUND MINES
(80 FED. REG. 53,070, SEPT. 2, 2015) RIN 1219-AB78**

Dear Ms. McConnell:

On behalf of BHP Billiton's San Juan Coal Company, PacifiCorp's Interwest Mining Company, and the Bituminous Coal Operators' Association (hereinafter all these entities are referred to as the "Companies"), this letter and its enclosures comprise the Companies' comments on MSHA's proposed rule for Proximity Detection Systems for Mobile Machines in Underground Mines, published in the Federal Register of September 2, 2015 at 80 Fed. Reg. 53,070. In addition to this letter, the Companies endorse the comments of the National Mining Association and the separately filed comments on behalf of Murray Energy Corporation. The Companies hereby incorporate those comments herein as though fully set forth.

The Companies' comments are based on our review of: (1) the proposed rule itself; (2) the public hearings held on the proposal by MSHA in Denver, CO on October 6, Birmingham, AL on October 8, Beaver, WV on October 19, and Indianapolis, IN on October 29; (3) the Request for Information on Proximity Detection Systems for Underground Mines, published in the Federal Register for February 1, 2010 (75 Fed. Reg. 5,009); (4) NIOSH research on proximity detection systems and recent discussions with NIOSH officials; (5) the Companies' experience with proximity detection systems; and (6) the unprecedented and extraordinarily frail economic state of the US coal industry, caused by unfavorable market forces and the enormous burdens of federal regulations.

AB 78-COMM-25

I. INTRODUCTION

To begin, the Companies strongly support the objective of the proposed rule. However, we must also tell you we object just as strongly to any promulgation of the proposal. The Companies say this because the proposal is so premature in terms of both its workability and the capability of underground coal producers to afford and implement its requirements that the proposal, as written, should not be promulgated in the foreseeable future. Instead, the Companies recommend and would support MSHA's working with industry, labor, and the National Institute for Occupational Safety and Health ("NIOSH") in a "Proximity Detection Partnership" to foster and carry out proximity detection system research activities that would further develop and quantify the performance of proximity detection systems to determine whether they provide the desired protection against striking and pinning hazards. Simply put, little or no research has been carried out on proximity detection systems, other than those used on continuous mining machines.¹ The application of proximity detection systems for use on mobile mining machines are entirely different "critters" than their applications on continuous mining machines. We add, too, that the "bugs" are far from being worked out in the implementation of the continuous mining machine proximity detection system final rules.

Should MSHA decide to move forward with this proposal, the Companies urge in the most sincere terms that MSHA should consider these and the other comments received thereon; but rather than promulgating this current proposal, MSHA should work with the Proximity Detection Partnership we have recommended above—and upon the establishment of a research agenda and identification of specific Partnership research projects—either re-propose a new rule, or even better, develop and publish a new "Request for Information." Such a new request for information would complement the Partnership's activities and advance the knowledge and practical applications so sorely needed regarding the use of proximity detection systems—and so sorely missing now. The Companies discuss these fundamental issues more fully below.

II. THE PROPOSED RULE IS PREMATURE, SHOULD NOT BE PROMULGATED, AND, IN REALITY IS ANOTHER REQUEST FOR INFORMATION

The Companies have reviewed the abovementioned February 1, 2010 Request for Information ("RFI") and compared it to the September 2015 proposal. To buttress the fundamental and key comment above that this proposal should not be promulgated; but rather should (following work by the Proximity Detection System Partnership we recommend be created) be either re-proposed or developed into a new request for information, it is important to point out that it was the 2010 RFI that initiated MSHA's rulemaking activities on proximity detection systems. That RFI consisted of 25 detailed questions dealing with: the performance and effectiveness of the technology itself; the application of the technology to remote-control continuous mining machines; application to underground equipment other than remote control continuous mining machines; training; and benefits and costs,

¹ MSHA promulgated mandatory safety standards for proximity detection systems on continuous mining machines on January 15, 2015. 80 Fed. Reg. 2,188.

As noted above, this RFI ultimately led to the earlier cited January 2015 promulgation of proximity detection system standards on continuous mining machines—a “relatively simple” application of this technology (albeit not without its share of problems even now, as described further below), when contrasted to the current complex proposal for mobile machines underground. The current proposal is also filled with a series of questions on which MSHA is soliciting comments. More specifically, the proposal includes at least 16 areas on which MSHA is looking for more information. Many of these are the same as or in furtherance of or derivations of the questions asked in the 2010 RFI. By way of illustration, these questions include as follows.

- MSHA has asked for information on alternative technologies that might provide equivalent miner protection from pinning, crushing, or striking hazards.
- Although MSHA’s experience demonstrates that coal hauling machines and scoops are not routinely used on longwall working sections, MSHA is soliciting information and data on whether longwall working sections may require the use of proximity detection systems and should be included in the final rule.
- MSHA is soliciting comment on whether the proposed requirements should apply to other mobile machines in use on or off the working section and/or to coal hauling machines and scoops in use off the working section. MSHA specifically seeks comment on circumstances where it may be appropriate to require such systems for loading machines, roof bolting machines, and feeder breakers.
- MSHA has asked for comment on the numbers of persons who may be on the working section during a single shift for its cost calculations.
- MSHA has asked for comments on the proposed phase-in schedules and what modifications may be needed on machines with existing systems. MSHA also asks for comment on whether modifications can be made underground or whether there are other issues that would affect the compliance schedule.
- MSHA solicits comments on the proposed training for miners who operate or work near machines equipped with proximity detection systems, including the type, frequency, and content of training.
- MSHA is considering requiring miners to wear reflective clothing to reduce hazards associated with poor visibility and asks for comment on that issue, including how much reflective clothing should be required and where it should be worn.
- MSHA has asked for comment on whether to require a system to cause the machine to slow before causing it to stop, effective methods or controls against sudden stops, and what type of machine movement should be stopped. The agency also will consider whether a performance-based approach would be appropriate.

- The agency solicits comment on how the use of proximity detection systems and the overlap of protection zones might affect miners' work positions, such as a continuous mining machine operator who may need to work close to the continuous mining machine when cutting coal or rock.
- MSHA has asked for comment on a possible exclusion zone for miners, who would have to don miner-wearable components before entering certain sections.
- MSHA solicits comment on the proposed requirement for audible and visual warning signals on miner-wearable components and a visual warning signal on the mobile machines, particularly because visual signals may not always be within miners' sight lines. MSHA also solicits comment on the signal that indicates whether the system is working properly and whether an audible and visual signal is required.
- The agency requests comment on the proposal that proximity detection systems be installed in a manner that prevents interference that adversely affects performance of any electrical system and any experience or issues related to the use of systems from different manufacturers on the same working section. MSHA also requests comment on any experience or issues related to the use of a single miner-wearable component with systems from different manufacturers, or different models from the same manufacturer.
- The agency solicits comment on experience with maintenance of these systems.
- MSHA solicits comment on the frequency of system and miner-wearable component checks and any alternatives to proposed and existing maintenance requirements.
- MSHA asks for comment on the proposed recordkeeping requirements and any alternatives.
- MSHA also has solicited information and data on the advantages and disadvantages of applying proximity detection systems on mobile machines in underground metal and non-metal mines. Commenters should indicate what machines should be equipped with these systems and suggest compliance timeframes.

The key point here is that the state of proximity detection systems technology remains very much at an early stage. Industry participants at the MSHA public hearings (discussed in more detail below) raised questions and concerns over and over again about the efficacy of the technology and identified problem after problem about how to implement the proposal. In addition, we describe below, as well, the experience of the Companies with proximity detection systems. These issues are discussed further in the comments of the NMA and the separate comments of Murray Energy Corporation, which (as noted at the outset of these comments) the Companies endorse and adopt as their own

III. THE MSHA PUBLIC HEARINGS

As briefly noted above, the industry participants who spoke at MSHA's hearings uniformly addressed their concerns about the workability of proximity detection technology—including the technology used to satisfy the current requirements for continuous mining machines. Without repeating everything in the transcripts of these hearings (since they are part

of the administrative record of this rulemaking), the Companies wish to highlight some comments from each of the hearings.

Denver, CO, October 6, 2015—

At the Denver hearing, miners from Peabody Energy's Twenty Mile Coal Mine² said that they were still experiencing numerous problems with the proximity detection systems on their continuous mining machines. Mobile machinery at Twenty Mile did not currently have proximity detection systems installed, but although they thought it was a great idea for the future, as of now the technology was not reliable.

Birmingham, AL, October 8—

A miner from Walter Energy also spoke to ongoing problems with their continuous mining machines. Apparently, no proximity detection systems on mobile machinery had as yet been installed.

Beaver, WV, October 19, 2015—

At this hearing, miners from Alpha Natural Resources, Pinnacle Coal, and Consol said that it was difficult to equip multiple machines on the same section with proximity detection systems because of radio interference from the miner-wearable components. This results in equipment shutting down temporarily, thereby disrupting operations. As for the phase-in period of 36 months, it was viewed as outpacing the current rebuild schedule. Key was that the miners speaking at this hearing thought the proposal was overly ambitious and that MSHA needed to make sure its rule was timely and workable.

Indianapolis, IN, October 29, 2015—

Speakers from Peabody Energy Company's corporate safety department spoke to their disappointed view that proximity detection technology has not advanced to effectively and reliably operate on mobile machinery. These speakers said MSHA should delay finalizing the proposal until the technology is ready for use underground.

These statements are consistent with the experience of the Companies in connection with proximity detection systems—and it is to that topic which we next turn.

IV. THE COMPANIES' EXPERIENCE WITH PROXIMITY DETECTION SYSTEMS

One of the Companies has been working extensively with proximity detection systems, as follows. The Company began this past August by working on the surface to equip its continuous mining machines and its battery-powered coal haulage machines with proximity detection systems. Initial testing on the surface was completed in September.

² Twenty Mile has since been sold to Bowie Resource Partners LP.

In October, the Company began testing this equipment underground in a non-production mode. During this period, the Company learned a great deal about proximity detection system capabilities, as well as problem issues. In mid-October, non-production testing wrapped up. Testing during production commenced in November. A list of problem issues identified during this time follows.

1. The systems available today are impacted greatly by the presence of metal, i.e., rib screen, roof screen, parked equipment, etc.
2. The systems available today have their performance negatively impacted when they are near multiple electrical cables and especially section transformers. A specific example being that an electrician standing 40 feet into a crosscut, examining the electrical installation, caused the coal haulers to slow or even stop, because the electrical energy enhanced the signal from his locator. Please note the Company was requiring every person inby the loading point to wear a locator.
3. There are no control systems capable of handling outputs from a proximity detection system on any diesel powered equipment. The Company only has diesel powered scoops, (although this equipment is actually LHDs and may not be included in the MSHA definition of a "scoop").
4. Installation of the equipment really needs to be done during manufacture or during a major rebuild. If the components and cables are not installed properly, they can be easily damaged.
5. The installation of proximity detection equipment and intermixing non-equipped mobile machines into the work pattern can result in problems. The Company recently experienced a proximity detection system shutting down a coal hauler just as it passed through a travel-curtain, meaning it ended up parked just a few feet inby the curtain, without lights because the system was re-booting. That stopped coal car was then struck from behind by a diesel-powered scoop/LHD that was passing through the curtain a few moments later. Such collisions have the potential to result in serious injuries to miners.
6. Available systems do not offer collision avoidance; although at some point in the future it is anticipated that Matrix or others will have improved their capabilities to include that.
7. Issues encountered with regard to dust sampling are almost certain to impact any mine that is implementing proximity detection systems in use. Those issues will be even greater beginning on February 1, 2016 when the 15 consecutive shift sampling begins.

8. MSHA must realize that this technology does not provide a plug and play type of solution. They require individual vehicle and individual mine configurations and testing. Proximity detection systems perform differently even when moving from one entry to another within the same working section.
9. The Company has concerns about the performance requirements MSHA has listed, fearing they could create a hazard to a scoop operator, for example, especially diesel-powered ones since their ground speed is faster than battery powered equipment. Having the proximity detection system stop the machine unexpectedly and somewhat violently, could result in an operator being thrown out of the cab. The Company is aware of instances within the mining industry where such a stop has thrown operators out. In at least one instance that operator was then run over by the machine he had been operating.
10. The systems present significant problems for performing trouble-shooting and maintenance activities. For example, if a mechanic is trying to identify which hydraulic hose is leaking, the mechanic must remove the proximity detection locator in order for the machine to be started because the mechanic has to be inside a red zone in order to see.
11. Supply deliveries can also create problems due to miners and equipment not equipped with proximity detection systems entering the working area.
12. One additional concern that the Company has is that the addition of proximity detection systems could prompt some very unsafe behaviors if miners begin to just rely on the proximity detection system rather than maintaining a sense of continual situational awareness.
13. Because these systems are in their infancy, as the technology matures, MSHA should build in a more sensible implementation strategy that provides incentives for operators to implement, but then work the bugs out in that particular mine's actual conditions. The current technology will not be a one-size-fits-all solution. It simply is not ready for that at this point.
14. Last, this Company has a concern that MSHA has only proposed this rule for underground coal mines. If these types of mobile equipment present a significant hazard in coal, what miracle element is there in a metal/non-metal mine that eliminates that hazard?

This Company has now equipped all of its continuous miners and battery-powered coal hauling units with proximity detection systems. The problems described above remain, however, albeit minimized by working on adjustments to miners' behaviors and limiting visitors in the working areas.

Another of the Companies also has several specific comments about the proposed rule. Please know that these are illustrative of that Company's overall concerns with the proposal, and are not intended to be, nor are they that Company's only problems with the proposed rule. These specific, illustrative comments are as follows.

With regard to the longwall exception, it should cover all operations related to a longwall. During longwall setup and teardown, a proximity detection system would be unworkable because miners cannot move to a safe location which is far enough away from a scoop to prevent unnecessarily activating the proximity detection stop function. Also, it has been proven that the marker fields generated from proximity detection system- equipped machines will couple to continuous metallic structures and change the response of the proximity detection system. The longwall shields and panline are continuous metallic structures.

With regard to proposed section 75.1733(a)(3), which would require 36 months to comply for existing machines without proximity detection systems, many haulage machines and scoops will not be scheduled to be out of service for longer than 36 months. Additional time is needed to equip these machines. A 36-month time frame will increase costs and MSHA has not considered this problem in its assessment of the cost of the proposed rule.

MSHA indicates it used seven miners per working section in assessing the costs of proximity detection systems. A real average that includes all potential mine employees on a working section would be a higher number. As for proposed section 75.1733(b)(1) which would require a machine to stop before contacting a miner, mine operators need the flexibility to configure proximity detection systems and machine responses based on individual applications. Machines which interact with another, machines that require a ground standing operator to be in contact with it, and machines without specific capabilities for motion control need allowances outside the exact wording of this proposed requirement. If a miner cannot do his job safely because of the proximity detection system, he will remove his miner-wearable component.

MSHA should not require that "machines slow down before stopping" because some machines do not have this capability (i.e. battery powered DC traction drives), and in some cases, it is more important to stop the machine as fast as possible to prevent contact with miners.

In regard to "protect the on-board operator from sudden stops," it is much more important to do what is necessary to prevent the machine from contacting a miner. Haulage machines and scoops in coal mines do not travel fast enough to pose a safety hazard to on-board operators as a result of a stop due to proximity detection system action.

As for the warning signals provisions in proposed section 75.1733(b)(2), there is no demonstrated need or value for additional lights or indicators other than provided by the current proximity detection system suppliers. The only two available proximity detection systems have an audible and visual indicator on the miner-wearable component and a visual warning signal on the machine. These have proven very effective in providing feedback to the miners and machine operator. For the miner who works all day, every day around specific machines, these indicators are valuable to train the miner about the proximity detection system zones around a machine. In

a short time working with the proximity detection system, the miner learns exactly where the zones are located. After this, the visual and audible indicators on the miner-wearable component have minimal value. With the noise generated by most machines, an audible indicator on the machine is also not valuable to the machine operator. However, the multiple, distributed, visual indicators on the current proximity detection systems are very effective at letting the operator know if his machine is not moving because of the proximity detection system.

With regard to the provision in proposed section 75.1733(b)(4), when the proximity detection system is not functioning so “that all miners on the working section know that the machine mounted proximity detection component is not functioning properly,” this indication should be the same as the standard for any other non-proximity detection machine system function and the OEM bypass.

V. NIOSH RESEARCH ON PROXIMITY DETECTION SYSTEMS AND RECENT DISCUSSIONS WITH NIOSH OFFICIALS

MSHA’s proposal maintains that it “intends that this proposed rule would take advantage of existing proven technology, to minimize the burden on mine operators, and allow for advances in proximity detection technology.”³ MSHA then refers readers of the proposal to NIOSH’s web site for additional information.⁴

It is surely appropriate for MSHA to refer to NIOSH in this still very difficult and complex technological area. After all, NIOSH is the repository of federal government mine safety and health research.⁵ And in that respect, it appears to the Companies that NIOSH believes much more work needs to be done to determine whether the proximity detection systems currently available to underground coal mine operators provide protection to miners working near mobile machinery. Please go to http://www.cdc.gov/niosh/mining/researchprogram/projects/project/applicability_of.html which describes a key research pilot project begun in October 2014. That project, as you will see, has “one research aim,” i.e., to “[d]etermine whether the proximity detection systems currently available for use on mobile underground coal mining equipment provide protection against striking and pinning hazards.” The more detailed description of the project is even more illuminating. Thus, it states “Proximity detection systems are being used to improve safety of miners working near underground mobile equipment. However little or no research has been conducted to quantify the performance of these systems and to determine whether they provide

³ See 80 Fed. Reg. 53,072.

⁴ *Id.*

⁵ See MINER Act section 6 which created the Office of Mine Safety and Health within NIOSH, which (among other things) has as its purpose “to enhance the development of new mine safety technology and technological applications and to expedite the commercial availability and implementation of such technology in mining environments.” MINER Act section 6 amended section 22 of the Occupational Safety and Health Act of 1970 to establish a new subsection (h), “Office of Mine Safety and Health.” 29 U.S.C. §§ 651, 671(h).

protection specifically against striking and pinning hazards.” A hard copy of the description of this research project is attached.

This pilot project has been completed. Although a report on it will not be prepared by NIOSH, it has led to additional research projects which were begun in October 2015. The Companies believe this ongoing NIOSH research will be seminal in augmenting the body of knowledge vital to MSHA in continuing to work on the proposed rule. All the more reason to establish the Proximity Detection Partnership the Companies have discussed above. Further, you should know that the undersigned Counsel for the Companies has discussed the creation of this Partnership with appropriate NIOSH officials. We are pleased to inform you that they are very keen on moving forward on such a partnership.

VI. THE UNPRECEDENTED AND EXTRAORDINARILY FRAIL ECONOMIC STATE OF THE US COAL INDUSTRY

As we shall discuss below, the unprecedented and extraordinarily frail economic state of the US coal industry presents the most challenging time the industry has ever faced. A combination of significantly increased gas supplies at historically low prices, coupled with an enormous and costly array of new regulations over the past seven years (including MSHA regulations) has resulted in—

- sharply reduced coal burns by electric utility customers;
- a glut of coal inventory nationwide; and
- coal prices in freefall.

This toxic combination has led to coal markets, both domestically and internationally, declining daily—and the Companies expect, to our dismay, but very candidly, the situation will only get worse. MSHA must consider in this rulemaking what is literally the on-going destruction of one of America’s bedrock industries—and this grim fact, in combination with all of the Companies’ comments above, must result in the prevention of this proposed rule from being finalized.

Historically, in the modern era, the US coal industry’s annual production was around a billion tons per year. In 2015 alone, however, not only will coal production fall to about 750 million tons, but even more troubling, of that 750 million tons, only 609 tons will have been delivered—meaning there is a 150 million ton glut of coal produced but not delivered. This is an unprecedented situation.

Looking ahead, the Companies foresee in the near future, coal production of 500 to 550 million tons of coal annually—meaning US coal production will have been cut in half from peak levels. The human tragedy accompanying this pervasive decline is also telling. Across the country, the number of coal miners employed has declined 28.4% from the number employed in the first quarter of 2009. These lost jobs are the high-paying foundation of many rural

weakening (if not demise) of, companies servicing the mines themselves, portend the destruction of these communities.

The Companies are committed to the safety and health of our employees. We want each and every one of them to return safely to their families after their shifts have been completed. The Companies do not want to see our miners—or any miners around the country—staying at home without employment. Sadly, that is what we are seeing.

By way of illustrating what we have sketched out above, with the permission of the publisher, please find attached an article from the December 8 edition of SNL Financial, entitled “After already big losses, US coal burn to tumble further.” We urge you to read it carefully as it graphically describes what the Companies have said above.

VII. REGULATORY CHALLENGES DISCOURAGING COAL UTILIZATION

The coal industry is not only being squeezed by unfavorable market forces – falling coal production, increased deployment of gas-fired power plants, and cheap, plentiful natural gas – but the industry is also facing intense regulatory pressure that presents high hurdles to coal utilization. Those challenges stem from increasingly stringent regulation of coal operators, such as by MSHA’s imposing ever more onerous health and safety regulations on underground mines and by OSM’s proposed Stream Protection Rule which threatens the viability of long-wall mining practices, as well as by indirect pressure on coal mine customers such as from unprecedented greenhouse gas regulations that may force many coal-fired power plants to close. In addition to MSHA’s costly new underground health and safety regulations (such as potentially infeasible respirable coal dust requirements), many environmental regulatory challenges pose the risk of “death by a thousand cuts” to the industry, including:

- The Stream Protection Rule: OSM proposed the Stream Protection Rule in July 2015 to replace the 1983 stream buffer zone rule, reinstated after the 2008 Bush Administration’s rule was vacated after prolonged litigation. If finalized, that proposal will not only substantially increase permitting and operational costs, but will also cause significant permitting delays. The rule also threatens the continued viability of valuable underground mining techniques like longwall mining because it would prohibit allowing any temporary subsidence while mining is ongoing. Crippling longwall mining would be devastating to the communities in the Northern Appalachian and Illinois Basins that depend on those operations for jobs and taxes. A Ramboll Environ study commissioned by the National Mining Association predicts that between one-fourth and two-thirds of total U.S. recoverable coal reserves would become uneconomic under the proposed rule. That would have serious consequences for Appalachia and the Illinois Basin; between 47% and 81% of coal in Appalachia would be stranded by the rule and in the Illinois Basin, 23% to 68% of coal could be stranded. In addition, Ramboll Environ projects that the Stream Protection Rule would cost as many as 281,000 jobs, including between 40,000 and 78,000 coal mining jobs in addition to job losses in mining support industries.

- The Clean Power Plan (EPA's final section 111(d) existing source emission guidelines for fossil fuel-fired electric generating units): The Clean Power Plan was designed to drive generation away from sources that emit more carbon dioxide per unit of electricity (principally, coal-fired electric generating units ("EGUs")) toward lower- or zero-emitting sources like natural gas and renewables. Under the rule, EPA will require a 32% reduction in carbon dioxide emissions from 2005 levels by 2030, with incremental reductions beginning in 2022. Those drastic reductions are achieved through EPA's new uniform carbon dioxide emission rate for coal-fired EGUs, a stringent rate that simply cannot be met through any operational or technological changes at the units themselves. In other words, there is no environmental control technology that can enable coal-fired EGUs to meet the new emission rate. Owners and operators of coal-fired power plants will be forced to reduce generation or close, and to "shift" generation to lower- or zero-emitting sources. As a result, EPA's own modeling predicts that many coal-fired power plants will be forced to shutter operations, leaving many coal mines without customers. Industry and its allies, including a large coalition of states, are seeking to stay the Clean Power Plan pending judicial review in an attempt to avoid the *fait accompli* EPA accomplished under the mercury and air toxics standards ("MATS") rule. Although the MATS rule was remanded to the agency by the U.S. Supreme Court for further work on its costs, and may still be vacated entirely, industry has already been forced to make costly compliance upgrades to comply with a rule that ultimately may be overturned.
- The New Source Performance Standards ("NSPS") for New, Modified, and Reconstructed EGUs (EPA's final section 111(b) NSPS regulations for fossil fuel-fired electric generating units): EPA's selection of partial carbon capture and sequestration as the "best system of emission reduction" for new coal-fired EGUs essentially ensures that, for now at least, there will be no new construction of coal-fired power plants in the United States as that technology is simply not cost-effective. Legal challenges to the 111(b) rule are underway.
- The Cross-State Air Pollution Rule ("CSAPR"): EPA's recent proposed revisions to the Cross-state Air Pollution Rule would impose an even higher "cost-effective control level" - \$1,300/ton of NOx, as opposed to the prior rule's \$500/ton cost – for NOx emissions from power generation. This is likely to discourage use of coal in favor of other fuels with lower NOx emissions.
- Revised NAAQs for Ozone: EPA ratcheted down the National Ambient Air Quality Standards ("NAAQs") for ground-level ozone to 70 ppb from 75 ppb. These revisions will force premature closure of existing coal-fired EGUs and result in the loss of thousands of jobs in the U.S.
- EPA's Mercury and Air Toxics Standards: EPA's Mercury and Air Toxics Standards (or "MATS") rule required additional pollution controls on coal-fired EGUs, at tremendous cost, to reduce emissions of mercury and other hazardous

air pollutants. The D.C. Circuit Court of Appeals heard oral argument on December 4 about whether the rule should be vacated in light of the Supreme Court's determination that EPA issued the rule inappropriately, having failed to consider costs in determining whether it was "appropriate and necessary" to regulate power plant emissions. The Court of Appeals turned down this argument today, although further litigation remains a distinct possibility. The damage, however, has already been done, as the rule was not stayed pending litigation and over 80% of coal-fired EGUs have already either incurred the expense of installing the technology or have shut down prematurely.

- The Coal Ash ("CCR") Rule: EPA promulgated a first-of-its-kind Resource Conservation and Recovery Act ("RCRA") subtitle D rule regulating the disposal of coal ash at surface impoundments and landfills. Coal ash, the byproduct of coal combustion, must now be disposed of in accordance with those costly regulations, which may be enforced by states or citizen groups and which require compliance information to be publicly posted on the Internet. Many power plants are choosing to close existing coal ash ponds rather than comply with the rule's requirements. Those operators who are continuing to dispose of coal ash are finding compliance to be expensive and time-consuming, putting further cost pressure on the use of coal for electricity.
- Other Legal and Regulatory Challenges: The industry also is facing increased scrutiny of self-bonding by state regulators; the proposed restrictions on self-bonding in the Stream Protection Rule; robust and prolific legal challenges from ENGOs to federal coal leases and permitting decisions under the Clean Water Act ("CWA") and the Surface Mining Control and Reclamation Act ("SMCRA"); and increasingly costly permitting conditions in NPDES/CWA Section 402 permits with the advent of EPA's insistence on selenium and conductivity limits.

VIII. CONCLUSIONS

In conclusion, the Companies strongly believe that this proposed rule should not be promulgated for the reasons described above. To sum up, proximity detection system technology for mobile machinery in underground coal mines is still in a preliminary developmental stage. The views of the Companies and other mine operator representatives attest to that not only as described in this letter, but throughout the MSHA hearings. In addition, MSHA's sister agency, NIOSH, recognizes that much more research is required to determine whether the technology provides protection against striking or pinning hazards. That research is ongoing; and can be effectively augmented by a Proximity Detection System Partnership that the Companies urge be established, consisting of the collective expertise of NIOSH, MSHA, the coal industry, coal miners, academia, and proximity detection system manufacturers.

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In short, this proposal is not ready for "prime time." There is no disagreement whatsoever that proximity detection systems, *when perfected*, can save lives. These systems, however, are not perfected and much work will be necessary to achieve that goal. Especially with the unprecedented and extraordinarily frail economic state of the US coal industry described above, finalization of this proposal is not warranted.

The Companies are prepared to work with the Proximity Detection Partnership we believe NIOSH will establish. We are also available to answer any questions you and your colleagues at MSHA may have.

Sincerely,



Edward M. Green
Counsel for the Companies

Attachments