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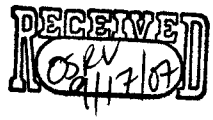

MSHA
Office of Standards, Regulations, and Variances
1100 Wilson Blvd., Room 2350
Arlington, VA 22209-3939

Re: RIN 1219-AB46, Sealing of Abandoned Areas

Thank you for the opportunity to submit these comments regarding the above-styled rulemaking for sealing of abandoned areas. I submit these comments on behalf of the West Virginia Mine Safety Project of the Appalachian Center for the Economy and the Environment. The Appalachian Center is a regional, non-profit law and policy organization. The West Virginia Mine Safety Project offers direct legal assistance to West Virginia coal miners regarding workplace health and safety matters and advocates for protective mine health and safety standards.

We submit these comments mindful of Congress's overarching mandate that MSHA is to undertake its regulatory and enforcement duties with miners' safety and health foremost in mind. After all, "Congress declares that the first priority and concern of all in the coal or other mining industry must be the health and safety of its most precious resource – the miner."[1]

The year 2006 was one of the most tragic in recent years for coal miners, their families, and their communities – due in large part to MSHA's inadequate standards for sealing of abandoned areas.[2] At the Sago Mine in West Virginia, 12 miners lost their lives when a seal failed to contain a methane explosion in an abandoned area of the mine. Just a few months later, five more miners perished when a seal failed to contain an explosion at the Kentucky Darby Mine.

Had MSHA and the coal industry been following the law, however, these tragedies may well not have happened. AS MSHA itself notes in its emergency temporary standard (ETS) in this proposed rulemaking, Congress has long-mandated that seals of abandoned areas be capable of withstanding an explosion:

[1] 30 U.S.C. § 801(a).

[2] Of course, as subsequent investigations revealed, these tragedies were compounded by a host of systemic issues other than the sealing of abandoned areas, e.g. problems with self-contained self-rescuers, communications with trapped miners, and rescue teams. While improving MSHA's regulation for sealing of abandoned areas is long overdue, by no means will this improvement alone prevent tragedies such as those of 2006.

> In the case of mines opened on or after the operative date of this title, or in the case of working sections opened on or after such date in mines opened prior to such date, the mining system shall be designed in accordance with a plan and revisions thereof approved by the Secretary and adopted by such operator so that, as each working section of the mine is abandoned, it can be isolated from the active workings of the mine with explosion-proof seals or bulkheads.[3]

In 1992, MSHA developed a standard which supposedly met the explosion-proof mandate. The standard called for seals to be constructed of solid concrete blocks. However, in acquiescing to the coal industry, MSHA's standard further permitted seals to be constructed with alterative materials – commonly, cheaper, easier-to-handle cementituous foam blocks. Seals constructed of such alternative materials were permissible under MSHA's standard so long as they were able to withstand a paltry horizontal static pressure of 20 psi.

As Professor Patrick C. McGinley, an expert in the fields of administrative law and mineral law and policy, points out:

> When analyzing a federal agency interpretation of its enabling statute courts and agencies are bound to adhere to the principle first delineated by the Supreme Court of the United States in *Chevron v. N.R.D.C.*, 467 U.S. 837, at 842 843 (1984). Chevron instructed that "[w]hen a court reviews an agency's construction of the statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress."
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> Section 863 (z) of the MSHA of 1969 contains a mandatory, not a discretionary standard, by which MSHA is to determine the adequacy of mine seals:
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> > When sealing is required, such seals shall be made in an approved manner so as to isolate with explosion-proof bulkheads such areas from the active workings of the mine.
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> ***
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> In sum, it is apparent that the 20 psi standard of 30 C.F.R. §75.335 is inconsistent with the unambiguous statutory mandate of the Mine Act that coal mine seals be "explosion proof." When construed in accordance with the Supreme Court's instruction in *Chevron v. N.R.D.C.*, it is clear that MSHA's regulation failed to "give effect to the unambiguously expressed intent of Congress." See, 467 U.S.837, 842, 843.
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> MSHA's adoption of the 20 psi standard relied upon Report 7581 which was guided by a

[3] 30 U.S.C. § 863(z)(2) (emphasis added).

> historic consensus rather than the very high standard of safety intended by the Mine Act's "explosion proof" mandate --- thus relying on factors Congress did not intend for the agency to consider and ignoring foreseeable explosion pressures that its own research identified. The explanation offered by the agency --- that it relied exclusively on Report 7581 --- ignored the contradictory evidence in the report itself that explosion proof seals could be constructed to withstand foreseeable explosive pressures. Finally, MSHA's meager explanation for choosing the 20 psi standard is totally implausible, given the fact that stronger seals have been designed to withstand foreseeable mine explosion pressures substantially in excess of 20 psi.[4]

Thus, the 20 psi standard was plainly illegal in light of foundational administrative law principles and MSHA's warrantless reliance on Report 7581. As such, MSHA has no choice but to proceed with a strengthened standard, and MSHA is moving in the right direction with this ETS. Nevertheless, the ETS needs strengthened if it is to be as protective of miners as Congress mandated.

As the ETS is written at 30 CFR § 75.335(a), seals constructed after May 22, 2007 must be capable of withstanding only 50 psi overpressure when coal operators monitor the atmosphere behind the seals and maintain them inert. If operators wish to avoid monitoring behind the seals and avoid maintaining the atmosphere inert, then generally speaking, seals must be constructed to withstand 120 psi overpressure. Moreover, apparently in a nod to a NIOSH study[5] demonstrating that some explosions within sealed areas can exert as much pressure as 640 psi, the ETS requires in special cases that seals be capable of withstanding overpressures of greater than 120 psi if an operator is not monitoring the atmosphere and maintaining it inert.

We are concerned about the safety of miners on a couple of levels when sealed areas are in the explosive range. First, the ETS does not appear to require monitoring of all seals that are within the explosive range. Second, the ETS does not require miners' unconditional evacuation from mines when seals are going through the explosive range.

The ETS at 75 CFR § 335(b)(4) sets forth how miners are to be protected when the sealed areas are in the explosive range. However, 75 CFR § 335(b) begins with a delineation only of (1) seals constructed prior to May 22, 2007, the effective date of the ETS, and (2) seals constructed on or after May 22, 2007 which are designed to withstand only 50 psi overpressure. Thus, we are concerned that at 75 CFR § 335(b)(4), MSHA does not clearly spell out how or whether miners who are working in mines with seals built to withstand 120 psi or greater will be protected when the atmosphere behind such seals is within the explosive range. Monitoring should be required for <u>all</u> sealed areas to determine when those atmospheres are in an explosive range – both during the time immediately after seals are constructed, and regularly thereafter. Then, once an atmosphere is in an explosive range – regardless of how much pressure a seal is designed to withstand – miners should be evacuated from the mine (not

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[4] McGinley, Patrick C., Memorandum for the File, MSHA 20 psi Seal Standard / Report of Investigation 7581, "Preliminary Report on the Sago Mine Disaster," July 19, 2006. Footnotes omitted.

[5] Zipp, Karl, Sapko, and Brune, "Explosion Pressure Design Criteria for New Seals in U.S. Coal Mines," (Draft Report), National Institute for Occupational Safety and Health (2007).

just the "affected area" as the ETS calls for at 75 CFR § 335(b)(4)(ii)) until the atmosphere no longer is explosive. Only then would the regulation protect miners as Congress intended.

Moreover, the ETS at 75 CFR § 335(b)(4) allows mine operators, in lieu of evacuating miners when sealed areas are in the explosive range, to keep miners underground pursuant to an action plan in the atmospheric sampling protocol developed as part of the ventilation plan. This is an unacceptable risk to miners, given the enormous potential for catastrophe should a seal fail. Finally, in the ETS, MSHA requests comments and specific data on whether its approach here (not requiring evacuation of miners in all instances when sealed areas are in the explosive range) is adequately protective of miners. However, MSHA's approach here should be just the opposite, i.e. it is MSHA's burden to demonstrate that an alternative to unconditional evacuation of miners is adequately protective. However, MSHA has made no such showing in the ETS.

We share the concern, as has been raised by the United Mine Workers of America, that the atmospheric sampling protocol outlined in the ETS would not yield an accurate picture of the atmosphere in sealed areas that are enormous in size. In other words, some seals block off areas that may be several square miles in size. Thus, there may be life-threatening, explosive atmospheres lurking behind seals, which go undetected. Therefore, sampling through two tubes at the seals themselves – one which would extend only 15 feet into the sealed area, and one which would extend only as far as the center of the first connecting crosscut inby the seal, as required at 30 CFR § 75.335(d) – is inadequate in many situations.

To this end, MSHA has recognized the possibility of monitoring through surface boreholes. In fact, the S-MINER Act would require borehole monitoring. As the coal industry is fond of pointing out, however, surface boreholes for monitoring may not be feasible in all settings – such as where topography/geography or existing man-made structures would prohibit drilling on the necessary surface sites, or where the subject coal company may not have total ownership and control of the necessary surface site. However, as other commenters have noted, new drilling technology allows drilling from sites other than those directly above sealed areas. Moreover, given the rural location of many underground coal mines and ownership patterns by which coal companies control vast swaths surface lands, it is highly likely that coal companies could install boreholes directly above any given sealed area without much difficulty. As such, borehole monitoring should be an potential option in any setting, even if it is not feasible 100 percent of the time, and boreholes warrant more discussion than that afforded in the ETS.

As for seals which were constructed prior to May 22, 2007, the ETS's effective date, the ETS leaves much to be desired. The ETS does not even require these seals to meet the minimum 50 psi standard for newly-constructed seals. Even worse, the ETS requires no remediation or upgrading of these seals whatsoever. MSHA apparently takes solace in the requirement that these older seals are to be monitored and the atmospheres rendered inert should gases reach an explosive level. However, this could be no consolation to the 30,000 miners working in the United States in the hundreds of underground mines in which these inadequate seals are located. MSHA also apparently refuses to require remediation because, in some cases, removing and replacing an inadequate seal may be more hazardous than retaining the inadequate seal, or because construction of reinforcing seals outby the inadequate seals may be impractical in some settings. However, these are insufficient reasons to not explore each inadequately-constructed seal to determine whether some form of remediation is feasible and safe. After all, many operators inadequately monitor the atmospheres behind their seals, if they

actually monitor them at all. Given this reality, and given the feasible options for remediation in many instances, MSHA's refusal to even explore remediation of existing seals hardly meets Congress's mandate that seals be explosion-proof.

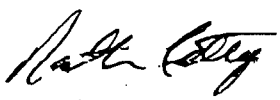
We commend the requirement in the ETS, 30 CFR § 75.335(c), which prohibits the use of open flames or arc (associated with welding, cutting, and soldering) within 150 feet of a seal. This is a key requirement for preventing another Kentucky Darby-type disaster.

We commend the requirement in the ETS, 30 CFR § 75.337(a)(2), that insulated cables be removed from areas to be sealed and that metallic objects passing through or across seals be removed, so as to lessen the risk of electrical-induced explosions. However, inexplicably, the ETS still allows metal sampling pipes and metal water draining mechanisms to pass through or across seals, with no discussion of the use of alternative materials. In promulgating the final rule, MSHA should explore the use of alternative materials for these functions, and if it does not require use of alternative materials, explain its rationale.

Finally, we commend the ETS's requirement, 30 CFR § 75.336(b), that a professional engineer have oversight of seal construction. This is a critical component creating accountability in the construction process if MSHA is to ensure that coal operators take very seriously their obligation to provide a safe workplace with explosion-proof seals. MSHA should retain this requirement in the final rule, rather than weaken it, as some in the coal industry have suggested, to allow only someone in senior mine management to oversee the seal construction.

Thank you again for your consideration of these comments and we look forward to MSHA's promulgation of an even more protective final rule that fully complies with Congress's mandate that seals be explosion-proof.

Sincerely,



Nathan Fetty
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