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Mine Safety and Health Administration
Office of Standards, Regulations and Variances
1100 Wilson Boulevard, Room 2350
Arlington, VA 22209-3939

Patricia Silva, Director

The attached comments represent the views and concerns of the United Mine Workers of America regarding the Agency's Emergency Temporary Standard; Sealing of Abandoned Areas; Final Rule. The Union will be happy to answer any questions that these comments raise with appropriate representatives of MSHA or to expand on any comment that requires additional clarification.

The Union will also have representatives attending at least one of the public hearings. Thank you in advance for immediate attention to this matter.

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United Mine Workers of America
Comments
on the
Mine Safety and Health Administration's
Proposed Rule
Emergency Temporary Standard; Sealing of Abandoned Areas; Final Rule

The United Mine Workers of America (UMWA or Union) is pleased to have the opportunity to offer these comments on the Mine Safety and Health Administration's (MSHA or Agency) Emergency Temporary Standard; Sealing of Abandoned Areas; Final Rule (Final Rule or ETS). The Union will attempt to place its comments on the record in a manner that corresponds to the Agency's writing of the Final Rule.

The Union has historically expressed concern with the standard practice of the industry for sealing abandoned or work out areas of the mine. These concerns were heightened in 1992 when the Agency approved the use of alternate seals and seal materials. Unfortunately, the Union's protests went largely ignored by both the industry and MSHA until the tragedies of 2006. While we recognize that MSHA has now addressed many of the concerns the Union has raised over the years, we also understand that a proactive rulemaking approach by MSHA as little as two years ago may have saved the lives of all the miners at Sago and Darby.

The Union is generally pleased with most of the requirements of the ETS and would commend MSHA personnel and support staff for their hard work on behalf of the Nation's miners. It is our intention to offer comments that we believe would further strengthen the ETS and should be incorporated into the final rule slated to take effect within the next nine months.

§75.335 Seal Requirements.

((a) seal strength requirements)

The Union agrees with most of 75.335 (a) in its entirety, and is generally pleased that the Agency has increased the minimum pressures these structures are required to withstand. However, we would seek to have MSHA place more emphasis on pushing mine operators to monitor all sealed areas as a basis for the final rule.

((b) sampling and monitoring requirements)

The Union agrees with the requirements contained in this section of the regulation and supports MSHA's position to require weekly sampling at all seal locations and have a record of the results retained at the mine for a period of one year. We also endorse the Agency's decision to establish concentration limits for methane and oxygen at levels that will ensure sealed areas do not present a serious hazard to miners.

However, the Union does not believe the current requirement of the ETS to sample only at the

seal location(s) is sufficiently protective of miners. Considering current mining practices it is very possible that abandoned or worked out areas of the mine could be isolated from active workings by a single set of seals. The area behind these seals could be several square miles in area. Based on the ETS the mine operator would only be required to monitor the atmosphere in the sealed area through two sampling tubes in one of the seals at this location. This method cannot accurately determine the atmosphere within the sealed area. Additional sampling locations must be established in order to effectively monitor these areas.

There is no question that technology exist today to monitor these areas through various means, including sampling tubes located in the seal itself and boreholes from the surface. Because of the vast areas seals can be constructed to isolate the Union believes both of these methods should be used to monitor all sealed areas after the effective date of a final rule. MSHA should require mining plans that incorporate these methods of sampling prior to permitting mine operators to initiate new mining in any area of the mine.

(b)(1)

The Union understands that there will be cases where mine seals, for a variety of reasons, do not outgas. This can make it extremely difficult to determine the combination and concentration levels of the gasses that make up the atmosphere in a sealed area. Considering that the protections contained in the new regulations are based on many different aspects of mine seals, including construction, resistance to over pressures, gas concentration in sealed areas and other important requirements it is extremely important that alternative methods for monitoring ingassing seals be more thoroughly defined by the Agency. Considering the experience and expertise of MSHA it is necessary for the Agency to offer more prescriptive guidance in this matter to mine operators.

The UMWA would again stress the need for monitoring to be as representative of the sealed area as possible. Therefore, in order to be as protective as possible and as stated previously, borehole sampling must be made part of the monitoring requirements.

§75.336 Seal design application and installation approval.

The Union agrees with the Agency's requirements for this section of the regulation.

§75.337 Construction and repair of seals.

The Union agrees with the requirements of this section to the extent the Agency is requiring routine inspection and oversight of the construction and repair of seals by the mine operator. However, we believe that MSHA must also include routine inspection and oversight of these tasks by authorized representatives of the Secretary. To do less could permit this section to become little more than paperwork compliance on the part of the mine operator.

The Secretary or her authorized representative must inspect all seals during at least part of there construction to ensure the operator is complying with the approved seal

construction plan. The Secretary should develop an inspection protocol to assist in such inspections.

§75.338 Seal records

The Union agrees with the Agency's requirements for this section of the regulation.

§75.371 Mine ventilation plan; contents

The Union agrees that these requirements should be contained in the mine ventilation plan.

In response to MSHA's request for comments on specific aspects of the ETS the Union offers the following suggestions in those instances.

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The economic and technical feasibility of monitoring and inerting sealed atmospheres

The question regarding the technical feasibility of monitoring was answered long ago. The technical ability to monitor sealed areas has existed for some time. In various countries around the world this is standard operating procedure. In fact, during mine accident or disasters in the United States, MSHA has demonstrated, with great success its ability to effectively monitor the mine atmosphere. There is no reason that this technology should not be required by the Agency to monitor sealed areas of underground coal mines. As stated previously, the Union seeks to have this monitoring requirement expanded beyond what is contained in the current ETS.

The economic impact monitoring will have on the operator is inconsequential to the potential impact not doing so could and has had on miners, their families and entire communities.

The Union is convinced that the recent advances in technology for inerting areas of the mine have increased greatly in the past several years. These advances are the result of problems in the industry that required some mine operators to inject gases or other inerting agents into hazardous areas of the mine to ensure they did not impose a serious risk to miners.

This necessity has pushed mine operators and the Agency to explore new techniques to minimize the hazards associated with fires or heating in underground mining operations. The result, while they may not encompass all possible technologies available, is to improve mine operators ability to inert areas of the mine more economically than before. The Union would also suggest as technology continues to advance the costs will continue to decline.

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The appropriateness of the strategy in the ETS for addressing seal strength greater than 120 psi.

The Union understands the determination by MSHA to follow, at least in part, the recommendations of NIOSH's Draft Report. However, the Union does not support the practice

of permitting areas of the mine to be sealed in the future to be left unmonitored. Current technology exists that permit the mine operator to monitor this area at in all instances where seals are to be constructed. The existence of a 120 psi seals may be significantly more protective than the current requirement, but it is not as protective as monitoring such an area would be. The Union supports the 120 psi requirement recommended by NIOSH, but seeks to have the area sampled at a sufficient number of locations to ensure the safety of miners to the greatest degree possible

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The Agency's approach to seal strength requirements.

The Union has always argued that the Agency must create regulations in a proactive and prescriptive manner. Therefore, we support the Agency decision to require specific parameters for seal strength. However, this does not mean that MSHA should permit sealed areas to be unmonitored. The seal strength required in each area should be determined by conditions inby the seals, based on the ability to actively monitor that atmosphere.

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The appropriateness of the three tiered approach to seal strength in the ETS.

The Union believes its previous comments address this issue.

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The feasibility in a final rule that existing seals be removed and replaced with a higher strength seal.

The UMWA understands the hazards associated with removal of existing seals and considers the potential for a life threatening condition to be created by such a task to be to great to endorse such a requirement. However, there is a compelling need to ensure that current seals be able to function as intended, including resisting potential over pressures that could compromise there effectiveness.

The Union suggests that the Agency, with the assistance of NIOSH explore ways to increase the strength of existing seals without requiring there removal. This could require new seals to be built immediately in front of existing seals or other methods that will provide the necessary protections

However, in those limited instance where this approach is not possible the Union understands the need to remove and replace inadequate seals. Because of the hazard this process posses strict requirements must be adopted to protect all miners at the operation.

The Union believe such work must only be performed by certified mine rescue teams working under apparatus. Further, all other work at the operation must cease until the new seal is installed and has adequately cured. No other miners should be permitted underground for any reason during this process.

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The sampling approach in the ETS.

The Union has commented extensively on this matter previously and would direct the Agency to those comments.

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The approach by the Agency not to require withdrawal of miners when certain specified concentrations in §75.335(b)(ii) are reached provided they implement a plan at-least-as-protective.

The Union is unaware of any plan that would be as protective as the withdrawal of miners from the affected area. Considering the potential for a catastrophic outcome the Union believe that operators should not be permitted to submit alternatives to withdrawal.

The Union also believes the Agency has a responsibility to carefully weigh its definitions of affected area and withdrawal. Given the dangers a sealed area in the explosive range presents to miners, the Union believe the entire mine should be considered affected area and withdrawal should be determined to be evacuation of the mine.

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The appropriateness of a ban regarding open flames associated with welding, cutting and soldering activities within 150 feet of a seal.

The Union agrees with the Agency determination. However, situations that currently exist underground, as noted at some of the public hearings must be addressed. The Union would suggest that in those instances where such potentials exist and the shop or other necessary installation cannot be moved to a new location MSHA review each and determine what action will be required to best protect miners. This could include, but need not be limited to, requiring seals that can withstand even greater over pressure than is currently called for in this ETS.

The Union would caution the Agency to complete a thorough examination of each instance where operators make such claims and base their determination on the findings in each case.

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The appropriate number of sampling pipes for a final rule.

The Union would recommend that at least two sampling pipes be located in the seal where the highest elevation is found in the bank of seals. One tube should be installed to monitor the atmosphere immediately behind the seals (within 20 feet) and the second should be extended into the middle of the crosscut or entry at the second break in by the seal. This sampling should afford the mine operator a better understanding of the atmosphere at this location. Both of these tubes should be located within 12 inches of the roof and protected from adverse condition, including roof falls.

These sampling locations do not preclude the need to require borehole sampling in all sealed areas. The Union is convinced that only a representative sampling process including a sufficient number borehole samples is sufficient to accurately monitor conditions in the sealed area. The purpose of the ETS is to enhance miners health and safety. Lesser monitoring than discussed above would not provide the level of protection needed.

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The requirement for water drainage systems for seals, including effective alternatives for a final rule.

The Union agrees with the Agency that seals should not be permitted to impound water. It is our belief that constructing the seal at the lowest elevation of the bank of seals with a water trap is an effective means to ensure this does not happen. However, the Union is not opposed to alternative means that perform the same function, provided they do not pose a new or additional hazard to miners.

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The scope and possible alternatives to the requirements related to site preparation, examinations and notification provisions of the ETS.

The Union is in agreement with the requirements of this section to the extent they require the mine operator to comply with certain minimal standards. We find nothing that should be either a burden or impediment to the operator.

However, the Union would reassert its belief that the Secretary or her authorized representative must be present to evaluate and inspect seals during construction.

The Union also Offers the following general comments on the ETS.

RI 7581 and Alternative sealing methods and Material

The UMWA is concerned that the ETS does not restore the mandates of the Mine Act, that requires "...seals shall be made in an approved manner so as to isolate with explosion-proof bulkheads such areas..."

This is clear based on the Agency's continued acceptance of Donald Mitchell's, Report of Investigation 7581 (RI 7581), which determined that seals need only withstand a static pressure of 20 psi and Clete Stephan's report, *Omega Block 384 as a Seal Construction Material*, which permitted seals to be constructed using "alternative" methods and materials.

The Union is aware that the Agency has increased the static pressure minimum for seal approval, but it must also issue a policy statement refuting the findings in the Mitchell report as insufficiently protective of miners. By not doing so MSHA risks the possibility that miners in the future could be subjected to a substandard regulation based on RI 7581.

More troubling immediately is the Agency's apparent refusal to prohibit the use of alternative methods and materials for seal construction. There is no question that the Omega Block seals at both Sago and Darby failed catastrophically, resulting in the death of 17 miners. Had the Agency required explosion-proof bulkheads at these operations it is very likely that at least 15 of those miners would be alive today.

Because of these obvious facts the Union would recommend that the Agency rewrite the EST to eliminate those portions of current 30 CFR §75. 335 which permits seal material other than solid concrete block of material or equal or greater strength.

Mine Specific Seal Requirements

The Union supports MSHA approach to seal approval in that such approval shall be made on a mine-by-mine basis and be determined by specific conditions in the areas to be sealed. However, the Union would caution against the potential for this process to become a "rubber stamp" approval process. Far too often regulations written with the best intentions become a means for quick, easy and automatic approval that can negatively impact miners' health and safety. The process of approval must be diligently followed for each set of seals to be constructed.

Approval of Different Sampling Frequencies

The frequency of sampling is a key component in ensuring the sealed areas do not present a hazard to miners. The most effective monitoring plan would obviously be one that require more frequent rather than less frequent sampling. Based on the available technology, the Union would contend that the possibility of continuous monitoring from a remote location is a practicable alternative. However, such monitoring should not replace a weekly sample taken by the mine operator in person. Under no circumstances does the Union see a possibility where sampling would be permitted less frequent than weekly.

However, based on condition within the sealed area there is always the possibility sample may need to be done more frequently. Mine operators should be well aware of this potential and MSHA must not hesitate to force this requirement.

Finally any time the frequency of sampling is changed, regardless of the reason, miners at the operation must be immediately notified of new sampling requirements and the reason for such adamant.

Training for Construction and Sampling of Seals

The Union is generally pleased with MSHA's decision to require more comprehensive training for those persons assigned to construct seals and sample the sealed areas. It is extremely important that miners and mine management be made aware of the importance of these tasks to their overall safety. Everyone employed at the operation must understand that sealed areas are still very much a part of the underground area of the mine, that must to be closely monitored.

The UMWA would express its opposition to placing any of this training or annual refresher training into the Part 48 Training currently required by regulation. The Union would also make two additional comments regarding this training, 1) the Secretary or an authorized representative should routinely sit in on this training to ensure it is adequate, and 2) certified trainer should be routinely reevaluated by the Agency to ensure they are competent and training material changes with technological advances.

The Union appreciates the opportunity to offer these comments and will be available to answer any questions the Agency may have. Representatives of the United Mine Workers of America will also be attending the hearings on this matter in July.

The UMWA offers the following responses to comments from the public hearings

“High Risk / Safety Zones

The Union adamantly opposes the incorporation of any such designation in the final rule. The suggestion that miners would be protected from a potentially hazardous condition if it is given a label and persons are restricted from entering the area is unbelievably naive. In the wake of the Sago and Darby disasters it is difficult to understand how such a proposal can be placed into the record. Looking at just those two incidents it becomes apparent that protections must be proactive and require an immediate response by the mine operator.

The question must be asked, where would the designated high risk or safety zone been located at Sago or Darby?

The UMWA argues that if sampling indicates the sealed area is approaching or in the explosive range the entire mine is affected and action must be taken immediately to correct the condition.

“Flexibility”

As expressed in our comments during the public hearings the UMWA does not believe operators are entitled to flexibility when making determinations regarding new seal construction, remediation of existing seals, monitoring of sealed areas, response to identified hazards or other issues affecting miners with regard to this matter. The final rule must be as prescriptive and unambiguous as possible if we are to assure miners they are being adequately protected.

The Union views any flexibility written into the rule as a potential loophole for operators to avoid offering the highest degree of safety to the miners. Unfortunately, history has shown flexibility to be an unnecessary relief from regulation to mine operators and an extreme danger to miners.

“Eliminating or limiting the ETS’s requirement for certified or professional engineers”

The employment of a certified or professional engineer with regard to seal design and construction is critical to the overall effectiveness of the final rule. The Union agrees with the Agency’s decision to require seal design plans to be completed and certified by an engineer prior to being submitted for MSHA approval. We would also propose that the engineer be present during the construction of each seal and certify that it is being installed according to the approved plan.

The Union is not suggesting they be present for the complete construction of each seal, however, they must be required to witness enough of the construction to ensure they meet the plan requirements. Upon completion of the seal, the engineer must be required to certify in a book designated for such purposes that the seal was constructed as designed.