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**From:** Lester, Alisha [mailto:Alisha.Lester@PacifiCorp.com]  
**Sent:** Wednesday, August 13, 2008 6:17 PM  
**To:** zzMSHA-Standards - Comments to Fed Reg Group  
**Subject:** RE: RIN 1219-AB58

-On behalf of Ralph Sanich.

RE: Written Comments on 30 CFR 7 and 75  
Refuge Alternatives for Underground Coal Mines - Proposed Rules  
RIN 1219 - AB58

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AB58-COMM-8



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August 8, 2008

Mine Safety and Health Administration (MSHA)  
Office of Standards, Regulations, and Variances  
1000 Wilson Boulevard, Room 2350  
Arlington, Virginia 22209-3939

RE: Written Comments on 30 CFR 7 and 75  
Refuge Alternatives for Underground Coal Mines - Proposed Rules  
RIN 1219-AB58

To Whom It May Concern:

Interwest Mining Company would like to express our appreciation for having the opportunity to comment on the Proposed Rules for Refuge Alternatives, RIN 1219-AB58. Set forth below are our comments.

Sincerely,

A handwritten signature in cursive script that reads "Ralph Sanich". The signature is written in black ink and is positioned above the typed name and title.

Ralph Sanich  
Manager, Health and Safety  
Interwest Mining Company

## **Service Life**

Unfortunately, the Notice of Proposed Rule contains, in certain instances, prescriptive requirements that will undermine the individualized approach envisioned by the Congress. For example, the preamble language contained in § 7.501 Purpose and Scope discusses, without explanation, fixed service-life limits for pre-fabricated self-contained units and components. Neither the preamble nor the supplemental materials in the rulemaking docket contain justification for this one-size-fits-all approach. Similarly, the industry's limited in-mine experience with these units provides little, if any, information to support this determination. We believe the preamble, consistent with Congressional intent, should be revised to reflect MSHA acceptance, upon submission of necessary documentation, of the manufacturer's recommended service-life limits, rather than apply an arbitrary deadline to all units. In the event that a manufacturer chose to not seek a different service-life, the 10 year structure and 5-year component timeframes in the Notice of Proposed Rule could be retained as the default service-life limits.

Grandfathering of Purchased and/or Delivered Pre-Fabricated Refuge Units, as was discussed by numerous witnesses during the public hearing, operators have placed purchase order's and begun taking delivery of refuge chambers believing they would be accepted for purposes of compliance with the agency's final rule, once promulgated. This certainty, while implied in the preamble to the Notice of Proposed Rule (pg. 34,142), has been called into question causing grave uncertainties about the compliance status of these units and, more problematically, raising the prospect of operators deciding to defer delivery of additional units until promulgation of the final rule. We were encouraged by the comments offered by Patricia Silvey, Director, Office of Standards, Variances and Regulation, MSHA who stated in response to a question posed during the first public hearing conducted in Salt Lake City that: ...a refuge alternative that was approved by the state or in an operator's approved ERP ... would be accepted for the maximum – for the estimated service life or a maximum of 10 years.

It is imperative that the agency unconditionally accept state approved units as meeting all requirements of the final rule. Moreover, to avoid the possibility that deliveries will be deferred or delayed due to remaining uncertainty, we call upon the agency to provide clarity and finality to this question as soon as practical, even in advance of publication of the final rule. Just as has occurred with other safety technology introduced into underground mines, improvements to the current generation of units can and will be made as the industry and manufacturers gain experience with the operation and durability of these units underground. It is crucial that miners have confidence that these units, which historically have been viewed with extreme skepticism, will provide the life sustaining capabilities that have been advertised. As such, we believe that MSHA should require modifications to existing units only if it is determined that the units design and functional capabilities will not, if properly maintain and operated, sustain life for the required period of time.

## **Pre-Fabricated Refuge Facilities – Structural Design**

Interwest Mining Company is very concerned regarding the requirements in § 75.1506(a)(1) which would require pre-fabricated rescue facilities to provide at least 15 square feet of floor space and at least 60 cubic feet of volume per anticipated occupant. The agency has received, both during the hearings and in written testimony, extensive comments questioning the foundation for this requirement and its historic basis. We agree with others that these requirements cannot, and should not, be considered life sustaining. Rather, the limited information considered by NIOSH and reflected as a recommendation in their report, upon which the agency's Notice of Proposed Rule is based were designed to provide comfort for persons who might be confined for prolonged (2 week) duration. Even if one were to accept the need to consider these criteria, the Notice of Proposed Rule design standards are in conflict with and far exceed the refuge facility specific standard developed and implemented in Directive D5 to implement the South African Mine Health and Safety Act of 1996 -- 0.6m<sup>2</sup> minimum per person floor area. Dr. Joel Haight, an associate professor of energy and mineral engineering at Penn State University prepared a report regarding floor space and volume requirements for the National Mining Association. As reflected on his curriculum vitae, Dr. Haight specializes in human factors engineering and has conducted research in work physiology and occupational biomechanics, all of which are applicable to this issue. Dr. Haight's analysis, which was limited to an evaluation of the proposed floor space and volume requirements in proposed § 75.1506(a)(1) recommends as values reasonable to sustain life:

- 7.5 ft<sup>2</sup>/person unrestricted floor space for seated refuge and 9.4ft<sup>2</sup>/person for supine refuge; and as reasonable to sustain life.
- 30ft<sup>3</sup>/person unrestricted volume

The significance of this issue cannot be understated. As noted earlier, deliveries of pre-fabricated refuge facilities have begun and are occurring on an almost daily basis. The existing units have been designed and engineered to provide occupants with, at minimum, 96-hours of life sustaining support and to maintain an apparent temperature below 95 degrees Fahrenheit. Additionally, the units are designed to conform to mine specific considerations, including space limitations. We know that the criteria of the Notice of Proposed Rule if unchanged, has the potential to reduce (derate) projected occupancy by as much 60 percent. It is important to recognize that mine operators, in order to comply with the requirements of PIB No. P07-03 which many viewed as premature given the on-going NIOSH study and the pendency of MSHA rulemaking, committed tens of millions of dollars to purchase these potentially life saving devices. To now impose requirements that effectively render these units non-compliant is unwarranted unless the agency can document that the units will not, if properly maintain and operated, sustain life for the required period of time.

## **Shelter Location and Positioning**

Section 75.1506 and 1507 contain, among other things, requirements related to the location and positioning of shelters in proximity to the working section or where mechanized mining equipment is being installed or removed. Additionally, the preamble explanation of this section identifies considerations, not specified in the regulatory text, to be considered in making these determinations. While the requirements in this section are in large part tailored after the

recommendations contained in the NIOSH report, portions have been ignored that should be considered prior to promulgation of the final rule. For example, the NIOSH report discusses whether "the presence of escape shafts or other means of exiting the mine could effectively eliminate the need" for outby refuge alternatives.

NIOSH's recognition that outby refuge alternatives could, in certain instances, be unnecessary is premised upon a detailed study performed for the institute by Foster-Miller. Among other things Foster-Miller conducted a detailed analysis of 12 past mining disasters to determine if refuge facilities would have had a positive impact on the outcome. The report's conclusion is that in no instance would outby refuge facilities have been beneficial to the outcome of the tragedy. Based upon this finding, we encourage the agency to include in the final rule authority for district managers to, on a upon site-specific case-by-case basis, approve plans not containing provisions for outby refuge facilities. Section 75.1506 (b)(1) requires refuge facilities to be located "Between 1,000 feet and 2,000 feet from the working face..." This provision, derived from the NIOSH report is in conflict with the placement standard which operators must meet to comply with the West Virginia statutory requirement that chambers be located "within 1,000 feet". We join with the West Virginia Coal Association and urge that the final rule be revised to require the place of refuge facilities "within 2,000 feet of the working face and from locations where mechanized mining equipment is being installed or removed."

More problematic than the distance requirement, however is the requirement in § 75. 1507(a)(11)(i) and (ii) which impose significant limitations on where a refuge facility can be placed in proximity to the working face and other designed locations or designated pieces of equipment. While we are cognizant of the need, as identified in the preamble to accompany this section, to protect refuge facilities from "potential damage from a working face explosion and ... the potential of a fire a certain areas or equipment" (FR 34161) we believe these provisions are misdirected and create the potential for introducing unnecessary risks. Review of the Foster-Miller report and our collective experience leads us to conclude that the risk of damaging a pre-fabricated refuge facility during movement and placement, and more importantly, the safety risk to miners as they maneuver these to comply with the placement requirements far outweigh the potential that these will be damaged by an event at the locations designated in the proposed rule. Should the agency not agree to delete these provisions, we would encourage that the final rule include authority for the district manager to approve an alternate location in the Emergency Response Plan.