
From: Jeff Dubbert <jdubbert@deserado.com>
Sent: Monday, November 16, 2015 6:34 PM
To: Davis, Leah - MSHA
Subject: MSHA refuge chambers response.docx
Attachments: MSHA refuge chambers response.docx

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Please find attached our response to the information request concerning the built in place refuge alternatives. If you have any questions please contact me at 970-675-4324.

Jeff Dubbert
Director of Technical Services
Blue Mountain Energ

AB79-COMM-11

RIN 1219-AB79 or Docket No. MSHA-2013-0033

Re: Built-In-Place Refuge Alternatives

FROM: Jeff Dubbert, Director of Technical Services, Blue Mountain Energy, Inc.

The use of built-in-place refuge alternatives (BIPRA) in lieu of movable chambers that are maintained within 1000 feet of the face can be a far superior refuge during a mine emergency. The design, performance, and comfort of the built in place shelters, would provide miners with a survivable atmosphere that justifies having the chambers located further from working section. We currently have both types of refuge chambers, the BIPRA and the movable chambers, our personnel would overwhelmingly prefer to be in a BIPRA than a movable chamber, and we believe that locating them further from the working face is justified in providing a superior rescue chamber.

But to make BIPRA economically feasible placement of the chambers must be spaced in a practical manner. A chamber that can be reached within 1 hour of travel (by walking) is adequate. Requiring very close spacing of the chambers will result the chambers never being installed by an operator.

Requiring the BIPRA to have a constant supply of air via a borehole from surface or a compressed air line is a good prudent practice. But requiring the chamber to be maintained under positive pressure when not in use is not justified, is an overkill and is not required. In an emergency, mine personnel can quickly start up blowers or fans that will provide air to the refuge chamber. Starting the blowers or fans within a half-hour is adequate time for starting of the positive air. Currently no other chambers are required to have positive pressure maintained so why add increase maintenance on a system that is better than the current regulations.

The operators must be allowed to providing air to the BIPRA via different means, that is by a blower on surface, cylinders stored underground, compressed air lines running through the mine, and etc. Each mine and each areas of an individual mine are different and must have different options to provide breathable air. To protect a pipe that is installed over several miles in the mine that provides compressed air to the BIPRA, can either be buried by installing in a trench or covering it with rock.

Providing air to a BIPRA from a blower on the surface and having the air discharge into the mine is a prudent design. It provides positive pressure to ensure that the mine's atmosphere does not enter the chamber.

Utilizing a SCBA with refill stations may be a better system than the SCSR with caches but either system can be effective and efficient to miners in an emergency situation. Requiring one system over the other is not necessary and does not allow an operator flexibility in determining each mine's requirements.

A movable wall or some type of modular design may make the BIPA more economically feasible. The option should be made available.

We believe that the BIPRA are a very good alternative to the movable refuge chambers and can be a far superior system when installed in the right location. But MSHA must make BIPRA feasible for the mine operators to install or the design will never get off the drawing board.