

Request for Information (RFI) on Refuge Alternatives

- **Purpose**
 - Requesting comments on issues and options relevant to miners' escape and refuge
 - Improve overall strategy for miners' survival and escape in an underground coal mine emergency
- **On file for public inspection at the *Federal Register*: August 7, 2013**
- **60-day Comment period closes October 7, 2013**

RFI Question Summary

- **Miner Training on Refuge Alternatives**

- Availability, use, and effectiveness of refuge alternative training units
- Availability and usefulness of training materials
- Experiences with in-place shelters and prefabricated units.

- **In-place Shelters**

- Design of an escape strategy using in-place shelters
- Advantages and disadvantages of in-place shelters vs. prefabricated units: location, maintenance, and costs
- Advantages, disadvantages, and restrictions of providing breathable air and communication through boreholes

RFI Question Summary (cont'd)

- **Escape Methodology – comprehensive escape strategy**
 - Use of SCBA system (with refill station)
 - Incorporate in-place shelters into escape strategy/ mine evacuation plan
- **Replacement of Brass Fittings and Valves**
 - Predictive maintenance or replacement schedule; include costs
 - New materials

RFI Question Summary (cont'd)

- **Approvals**

- Issues re: gas monitoring equipment
- Equivalent options to existing approval requirements

- **Apparent Temperature**

- Air conditioning: availability, use, cost
- Effects of outside air temperature on in-place shelters

RFI Question Summary (cont'd)

- **Physiological and Psychological Factors**

- Miners' confidence in refuge alternatives
- Effect of in-place shelters on miners' psychological and physiological well-being
- In-place shelters vs. prefabricated units: advantages

- **Additional Issues**

- Escape and refuge innovations
- Refuge alternative examinations: interval, content
- Grandfathering of state-approved structural components
- Effective use of inflatable stoppings (post event)
- Prevention of oxygen enrichment of refuge alternative atmosphere