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

RE: PPL P06-V-Emergency Response Plan, Post-Accident Breathable Air

Dear Ms. Silvey:

Foundation Coal Corporation is submitting the following comments concerning MSHA's Request for Information on the implementation of breathable air for underground mine emergencies. This topic is of utmost concern to Foundation Coal Corporation and its underground affiliates as MINER Act implementation plans are developed. The quandary Foundation Coal finds in developing comments on this issue include conflicting philosophies as well as the conflicting goals and timetables listed in the MINER Act.

The emergency planning philosophy that has been the backbone of all previous emergency planning underscored the premise that the first line of defense, obviously excluding prevention, was an early warning/detection system. This was followed by an escape system that emphasized evacuation to at least outby the problem area and then the evacuation of unneeded personnel to the surface. This system has not included any planning for extended stays in the mine, therefore the concept of providing a breathable air supply is new to our emergency planning. Prior to commenting on the RIF , I want to again urge the Agency to emphasize escape as the most viable emergency planning and not to allow the use of in-mine breathable air to result in any confusion over the first well established principle of reacting to a mine emergency, i.e., quickly escaping from inby the emergency. Breathable air and waiting for rescue must always be a last option decision.

Another practical conflict in the MINER Act and the Agency's implementation of the Act is the timing requirements of the individual pieces of the Act that will in sum make up an operation's implementation of breathable air requirements. The MINER Act needs to be reviewed holistically as to escape, SCSR deployment, refuge shelters and breathable air. The piecemeal requests by the Agency may be necessary as a response to the timetables incorporated in the MINER Act, however all planning, purchasing and design work by operators developing a mine emergency plan must incorporate all of the above issues together and not individual stand alone segments of the Act.

The first due date as noted is an operation's Emergency Response Plan (ERP). MSHA is apparently expecting operator's ERPs to include segments on planning for breathable air above the SCSR storage caches. As stated, most of the planning for use of breathable air has been in the storage of SCSRs. Although there has been information and some examples of refuge chambers it has been our belief that discussion on this issue would not occur until the NIOSH study was completed. The MINER Act clearly anticipates that the refuge shelter debate will be held at a later date. Section 13 of the Act requires NIOSH to "conduct research, including field tests, concerning the utility, practicality, survivability, and cost of various refuge alternatives in an underground mine environment. ..." As stated above, until this report is completed, and the Agency responds to its contents, and presumably requests public comments on the refuge chamber recommendation/proposed regulations it is difficult to move forward with a breathable air plan that ignores some type of stored air generating system i.e. a shelter. It is hard for me to reconcile a research and review completion date of no earlier than June 15, 2008 with the present RIF on breathable air. It appears that the Agency is going to move this issue forward in a manner that shelters are introduced without the benefit of the NIOSH study and the vetting of the best methods of providing breathable air

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The following are my responses to your specific questions in the RIF.

> It is difficult to determine what amount of air is needed for a "sustained period of time". In many ways it is easier for the sake of compliance for the Agency to layout a specific number without regard to any risk assessment of the individual mine involved. If that were the decision of the Agency then based upon my understanding of analysis done on rescuing survivors in mine emergencies, a 48 hour supply would be appropriate. As I noted, I have not personally studied all of the accident reports where rescue was involved, but I have spoken to people who have made this analysis. These people including the State of West Virginia's Task Force that was charged with reviewing this topic have concluded that a 48 hour supply of breathable air is the appropriate time period.
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> It is sometimes easier to choose a prescriptive one-size fits all number for any regulation or plan including the amount of breathable air necessary for operations. This methodology may make enforcement easier for an Agency, however in the long run the better methodology is for each operation to establish the amount of breathable air needed,

the proper location of the air, and delivery mechanism via a risk assessment analysis of a particular mine. The use of risk analysis would need to consider various factors such as mine design and layout and location of exits from the mine. There are advantages for using risk analysis rather then a prescriptive rule when developing a plan for breathable air.

Some examples of why an individual mine risk analysis is preferable over a prescriptive rule include:

- The location of the supply of breathable air may be dependent on the delivery system for that air. For example a borehole from the surface of a mine could provide an almost unlimited breathable supply of air. A mine that is considering using a borehole to deliver breathable air would want to establish one location in a section that may be several thousand or more feet from the working face. A prescriptive rule that lists a set distance from the face and requires constant advancement will eliminate borehole/breathable air design systems.
- Breathable air should be located in each section although as I stated the specific location needs to be flexible. In most instances I don't believe that locating breathable air on mains or sub mains would be necessary. Presently these areas will have a large supply of SCSRs and multiple entries of potential escape. Again in a risk analysis based system some areas on mains may be required to provide for breathable air storage, but in general I don't believe that a supply of breathable air is prescriptively needed in mains.

As of today there is no system of maintaining a ready supply of breathable air, other than SCSRs, that has been tested in the United States coal mines. There are a number of proposed shelter design prototypes from various manufacturers being developed. To date none of these manufactured designs have been approved in West Virginia, the state that is requiring some type of breathable air supply. Although the issue of shelters is not part of this RIF it is difficult to separate the issues of breathable air and shelter designs. Each of these systems offers methods of air generation. Any or all of them may be a satisfactory answer to specific coal operations.

Also there are systems using compressed air with recharging capability that may be a possible addition to this equation.

These systems are used in Australia for escape and may have promise in the United States, at least for some applications. By using a performance based approach requiring a risk analysis of the particular factors of each operation, these various methods may be adapted to an operation. These compressed air systems are rechargeable; therefore a compressed air supply system may provide a longer term supply of breathable air. Again, a performance based approach is needed so that some concept such as this may be analyzed.

It appears that MSHA intends for the industry to provide some type of refuge shelter and call it a breathable air location. Once the NIOSH study is completed that breathable air location will be melded into a refuge shelter. At this time, Foundation Coal recommends that MSHA provide a forum for information on breathable air systems that can be set-up as a stand alone system, to be used with a barricade type system. Ideally these systems can be incorporated with the final refuge shelter rules that will be forthcoming.

Sincerely,

John M Gallick

Director Safety

Foundation Coal Corporation