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U.S. DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

PUBLIC HEARING ON
EMERGENCY TEMPORARY STANDARD
SEALING OF ABANDONED AREAS - FINAL RULE

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TRANSCRIPT OF PROCEEDINGS

Lakeview Golf Resort & Spa
One Lakeview Drive
Morgantown, West Virginia 26508
July 10, 2007

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BEFORE:

- Patricia W. Silvey, Moderator
- William Baughman
- Ron Ford
- Javier Romanach
- Erik Sherer
- Clete Stephan

P R O C E E D I N G S

(Hearing was called to order at 9:15 a.m.)

MS. SILVEY: Good morning. My name is Patricia W. Silvey, and I am the Director of the Mine Safety and Health Administration's Office of Standards, Regulations, and Variances. I will be the moderator of this public hearing today on MSHA's Emergency Temporary Standard, or ETS, for sealing abandoned areas in underground coal mines.

On behalf of Assistant Secretary Richard E. Stickler, I want to welcome all of you to this public hearing. The members of the panel, and I'd like to introduce them, to my right, Erik Sherer -- and these are some of the people who helped developed the ETS. And to his right, William Baughman, and before I go -- Erik Sherer is with Coal Mine Safety and Health; excuse me. To his right, William Baughman, who's with my office. To my left, Clete Stephan, and Clete is with the Office of Technical Support. And to his left, Javier Romanach, and he's our attorney on this project. And to his left, Ron Ford, and he's an economist from my office.

1 This is the first of four hearings on the
2 Emergency Temporary Standard. The second, as most of
3 you know who've followed this rule-making so far, the
4 second hearing will be in Lexington on Thursday, and
5 the third will be in Denver on July 17th, and the
6 fourth in Birmingham, Alabama, on July 19th.

7 You know what happens, people say the best-
8 laid plans, the next sentence I had on here was that in
9 the back of the room we have copies of the ETS, and I
10 thought we did, but now I see that they've been
11 improperly collated, so assuming that we have a break,
12 we will have properly collated copies at the time of
13 the break. We do have the Federal Register notice
14 extending the comment period to August 17th. I think
15 most of you know the comment period has been extended
16 to August 17th.

17 The purpose of these hearings, as many of you
18 know who have participated in MSHA's rule-makings over
19 the years, is to receive information from the public
20 that will help us evaluate requirements in the ETS and
21 develop a final rule that protects miners from hazards
22 associated with sealed abandoned areas. We will also

1 use the data and information gained from these hearings
2 to help us craft a rule that responds to the needs and
3 concerns of the mining public, so that the provisions
4 of the ETS can be implemented in the most effective and
5 appropriate manner.

6 We published the ETS in response to the grave
7 danger miners face when underground seals separating
8 abandoned areas from active workings fail. Seal
9 failures at the Sago Mine and the Darby No. 1 Mine in
10 2006 raised awareness of the problems with construction
11 and design of alternative seals. MSHA investigated
12 these and other failures of alternative seals and
13 conducted in-mine evaluations of these seals. MSHA
14 also reviewed the history of seals in the United States
15 and other countries.

16 On February 8, 2007, NIOSH issued a draft
17 report titled, *Explosion Pressure Design Criteria for*
18 *New Seals in U.S. Coal Mines*. The report makes
19 recommendations for seal design criteria which would
20 reduce the risk of seal failure due to explosions in
21 abandoned areas of underground coal mines.

22 Based on MSHA's accident investigation

1 reports, the draft NIOSH report, MSHA's in-mine
2 evaluations, and review of technical literature,
3 MSHA determined that new standards are necessary to
4 immediately protect miners from hazards associated with
5 sealed areas.

6 The ETS addresses seal strength, design and
7 installation, construction and repair, sampling and
8 monitoring, and training. This ETS was issued in
9 accordance with section 101(b) of the Mine Act. Under
10 section 101(b), the ETS is effective until superseded
11 by a mandatory standard, and in accordance with the
12 Mine Act, the mandatory standard must be issued no
13 later than nine months after publication of the ETS.
14 The ETS also serves as the proposed rule, as most of
15 you know, and commences the regular rule-making
16 process.

17 As stated earlier, we will use the information
18 provided by you to help us decide how to help us decide
19 how to best craft the final rule. The preamble to the
20 ETS discusses provisions of the ETS and also includes
21 a number of specific requests for comment and
22 information. And I want to reiterate that. We

1 included a number of specific requests for information
2 in the ETS. And I would ask you, as you address the
3 provisions of the ETS and any specific requests for
4 comment that we have made, either in your comments with
5 us today or those sent to us in Arlington, please be as
6 specific as possible with respect to, one, the impact
7 on miner safety and health, specific mining conditions,
8 and feasibility of implementation. That will be very
9 important. At this point, I want to reiterate the
10 specific requests for comment and information.

11 Number one, in the ETS, MSHA considered a
12 performance-based approach to the strength requirement
13 for seals. However, as all of you know, we included
14 specific pounds-per-square-inch numbers when referring
15 to the strength of seals in the ETS, as the Agency
16 believes this represents a more appropriate approach.
17 MSHA is interested in receiving comments on the
18 Agency's approach to the strength requirement.

19 MSHA is also interested in receiving comments
20 on the appropriateness of the three-tiered approach to
21 seal strength in the ETS and the strategy in the ETS
22 for addressing seal strength greater than 120 psi.

1 Under the ETS, new seals must be constructed and
2 maintained to withstand: 50 psi overpressure when the
3 atmosphere in the sealed area is monitored and
4 maintained inert; 120 psi overpressure when the
5 atmosphere is not monitored and is not maintained
6 inert; and -- or an overpressure greater than 120 psi
7 if the atmosphere is not monitored and not maintained
8 inert, and certain other specified conditions are
9 present.

10 MSHA requests comments on the appropriateness
11 of the Agency's strategy for addressing seal strength
12 greater than 120 psi. If commenters believe a
13 different regulatory approach should be developed in
14 the final rule, MSHA would like commenters to provide
15 the details for such a strategy, rationale for such a
16 strategy, and feasibility of using such a strategy.

17 MSHA seeks the views of the mining community
18 regarding whether there are other effective
19 alternatives to the requirements in the ETS with
20 respect to providing the most appropriate and
21 protective action for miners exposed to hazards in
22 sealed areas. Commenters should provide supporting

1 data, specific alternatives, including information on
2 technological and cost implications.

3 Most alternative seals constructed before July
4 2006 were constructed to withstand a static horizontal
5 pressure of 20 psi. MSHA considered requiring mine
6 operators to remove existing seals and replace them
7 with seals that withstand at least 50 psi. MSHA also
8 considered whether to require operators to build new
9 seals outby existing seals or structurally reinforce
10 them.

11 At this point, MSHA believes that replacing
12 existing seals is impractical and in some instances may
13 create additional safety hazards. MSHA seeks comments
14 on the feasibility of including in the final rule a
15 requirement that existing seals be removed or replaced
16 with higher strength seal.

17 MSHA also considered whether to require mine
18 operators to reinforce existing seals. MSHA will
19 continue to explore technological advances addressing
20 feasible and safe methods to reinforce existing seals
21 in underground coal mines. Commenters are encouraged
22 to submit information and supporting data, as you are

1 going to hear me say that over and over again, because
2 please, when you submit your information, be specific
3 and include supporting data where applicable.

4 MSHA believes that the sampling strategy in
5 the ETS will yield results that reflect a reasonable
6 representation of the atmosphere in a sealed area.

7 MSHA requests comments addressing the sampling approach
8 in the ETS. The Agency is particularly interested in
9 comments concerning sampling, the sampling frequency,
10 including sampling only when a seal is outgassing.

11 MSHA requests comments on whether another approach is
12 more appropriate for the final rule, particularly when
13 the seal is ingassing. The Agency also requests
14 comments, information, and experiences of the mining
15 community concerning sampling sealed areas.

16 In the ETS, mine operators must develop a
17 sampling protocol to be included in the ventilation
18 plan and submitted to the District Manager for
19 approval. The ETS requires the mine operator to
20 implement the action plan specified in the sampling
21 protocol, or to withdraw all persons from the affected
22 area when specified concentrations are encountered.

1 Action plans must provide protection to miners,
2 equivalent to withdrawal, and address hazards presented
3 and actions taken when gas samples reach levels
4 indicated in the ETS.

5 Historically, when methane levels reached 4.5
6 percent in active areas, miners were withdrawn from the
7 areas that were -- were withdrawn from these areas.
8 MSHA requests comments on this approach and whether it
9 provides adequate protection for miners. Commenters
10 are encouraged to submit specific language, with
11 supporting data.

12 MSHA is soliciting comments concerning issues
13 related to establishing a sampling baseline. The ETS
14 requires that the mine operator specify procedures in
15 the protocol to establish a baseline analysis of oxygen
16 and methane concentrations at each sampling point over
17 a 14-day sampling period. The baseline must be
18 established after the atmosphere in the sealed area
19 is inert or the trend reaches equilibrium. MSHA is
20 particularly interested in comments concerning the
21 establishment of a baseline.

22 MSHA is requesting comments on the

1 appropriateness of the ETS requirement regarding the
2 use of open flames or arc associated with cutting and
3 soldering activities within 150 feet of a seal and the
4 feasibility of this requirement. Again, MSHA suggests
5 that commenters provide specific rationale in support
6 of their position and include alternatives, if
7 applicable.

8 The ETS requires each newly constructed seal
9 to have at least two sampling pipes. One sampling
10 pipe must extend into the sealed area approximately 15
11 feet, and the second pipe must extend into the first
12 connecting crosscut inby each seal and to the center
13 of the first connecting crosscut in the middle of the
14 intersection.

15 The ETS affords flexibility to mine operators
16 for the placement of the sampling pipe to allow more
17 accurate sampling strategies to better protect miners.
18 Therefore, the ETS requires that the location of
19 sampling points be specified in the protocol provided
20 under the ETS. MSHA requests comments regarding the
21 appropriate number and location of sampling pipes for
22 the final rule.

1 The ETS requires that corrosion-resistant
2 water drainage be -- a system be installed in the seal
3 at the lowest elevation within the set of seals and
4 that seals not impound water. MSHA requests comments
5 on this requirement for water drainage systems,
6 including effective alternatives for the final rule.

7 MSHA requests comments on the appropriateness
8 of the ventilation plan contents and whether additional
9 information should be included. As you know, we listed
10 a variety of information that must be included in the
11 ventilation plan. When submitting information
12 supporting your position, please include data related
13 to economic and technological feasibility.

14 The ETS requires removal of insulated cables
15 from the area to be sealed and removal of metallic
16 objects through or across seals. MSHA believes that
17 removal of insulated cables and metallic objects
18 through or across seals is feasible and will not
19 involve significant technical or practical problems,
20 but the Agency solicits comments on this provision.

21 MSHA is also requesting comments on the scope
22 and possible alternatives concerning site preparation,

1 examinations, the training requirements, and
2 notifications to the Agency related to construction and
3 repair of seals.

4 MSHA has prepared a Regulatory Economic
5 Analysis for the ETS. The Regulatory Economic Analysis
6 contains supporting cost data. MSHA requests comments
7 on all the estimates of cost and benefits presented in
8 the ETS and in the Regulatory Economic Analysis.

9 To date, the Agency has received one comment
10 on the ETS. You can view comments on the Agency's
11 website at www.msha.gov under the section entitled
12 Rules and Regulations. MSHA has answered, as most of
13 you know, a number of compliance questions from the
14 public covering a range of issues in the ETS. These
15 questions and answers are posted on MSHA's Seals Single
16 Source Page.

17 As many of you know, the format for the public
18 hearing is as follows:

19 Formal rules of evidence will not apply, and
20 the hearing will be conducted in an informal manner.
21 Those of you who notified the Agency in advance of your
22 intent to speak or who signed up here today will make

1 your presentations first. After -- I don't think --
2 it doesn't appear as though we will have any time
3 constraints though. After all scheduled speakers have
4 finished, others can request to speak.

5 If you wish to present written statements,
6 please clearly identify your material. As you know,
7 you may also submit comments following this public
8 hearing to MSHA, by August 17th, to the address listed
9 in the Federal Register.

10 MSHA will post the transcripts from the public
11 hearings on our website. Each transcript should be
12 posted approximately one week after the hearing.

13 We will now begin with persons who have
14 requested to speak, and please begin by clearly stating
15 your name and organization for the record, and also, if
16 you would spell your name, we would appreciate that.

17 So our first speaker today will be -- you'll
18 have to help me. Who is this?

19 MR. SHERER: It's Ron Wooten.

20 MS. SILVEY: Is it Ron? Are you the first
21 speaker? Okay, I'm sorry. Oh, that's what I couldn't
22 quite figure out here. Excuse me, now I did, even with

1 my glasses on. Interstate Mining Compact, Ron Wooten.

2 **RONALD L. WOOTEN**

3 MR. WOOTEN: Thank you very much, Ms. Silvey.
4 Good morning. My name is Ron Wooten, W-O-O-T-E-N,
5 and I am the Director of the West Virginia Office of
6 Miners' Health, Safety, and Training. Accompanying me
7 today is Mr. Monte Hieb, who is our Agency's Chief
8 Engineer, who will have some West Virginia-specific
9 comments at the conclusion of my brief remarks.

10 I am appearing today on behalf of the
11 Interstate Mining Compact Commission. West Virginia's
12 Governor, the Honorable Joe Manchin, III, currently
13 serves as Chairman of IMCC. IMCC is a national,
14 multi-state, governmental organization, representing
15 the natural resources, environmental protection, and
16 mine safety and health interests of its 24 member
17 states.

18 Several IMCC members implement their own mine
19 safety and health regulatory programs, as we do in West
20 Virginia, and almost all of the states carry out
21 training responsibilities pursuant to the Mine Safety
22 and Health Act of 1977, as amended by the Mine

1 Improvement and New Emergency Response Act of 2006, the
2 MINER Act.

3 My purpose today is to provide some
4 preliminary comments on the Emergency Temporary
5 Standard on sealing abandoned areas, published by the
6 Mine Safety and Health Administration on May 22, 2007,
7 at 72 Federal Register 28796. While we can appreciate
8 MSHA's desire to move expeditiously to address the
9 requirement in section 10 of the MINER Act to issue
10 mandatory health and safety standards for seals of
11 abandoned areas, we believe that the Emergency
12 Temporary Standard begs as many questions as it
13 answers.

14 Part of this results from the interaction
15 between the ETS and its accompanying preamble and other
16 MSHA documents, such as program information bulletins,
17 procedure instruction letters, and various documents
18 contained on MSHA's website, such as mine seal design
19 and approval requirements. These latter documents
20 expand upon and, at times, contradict the ETS and
21 essentially raise policy and technical documents to
22 the level of a rule, without following APA rule-making

1 requirements.

2 Given the overlap between MSHA's rules and
3 state regulatory programs, it is critical that MSHA
4 work with the states to clarify and resolve any
5 conflicts or confusion attending implementation of
6 the ETS. Many of the questions and concerns that we
7 articulate below could have been avoided or answered
8 had MSHA done more in the way of outreach to the states
9 in developing the ETS.

10 At this point, it will be incumbent on the
11 Agency, we believe, to work closely with the states
12 to either revise the rules or provide additional
13 background information so as to insure effective
14 implementation of the ETS. We encourage MSHA to use
15 the state regulatory agencies as a resource through the
16 IMCC in that endeavor.

17 The remainder of my testimony will address
18 several topics that are raised in the ETS, including
19 existing seals, new seals, and the certification
20 process.

21 Existing Seals: Given the implications for
22 the safety and health of miners, we agree with MSHA

1 that replacing existing seals may be impractical and
2 may create safety hazards. We also agree that seals
3 do not need to be universally remediated. Instead, an
4 assessment of risk should be undertaken to determine
5 whether the existing seals should be remediated to
6 insure effective operation. Any such risk assessment
7 should be based on location of the seals, their
8 proximity to work areas -- active work areas, the
9 nature of the gas concentrations inby the seals, and
10 the overall condition of the seals.

11 The West Virginia Legislature, recognizing
12 this concern, passed Senate Bill 68 this past March,
13 authorizing the Director of the Office of Miners'
14 Health, Safety, and Training to require additional
15 inspections and sampling where remediation may be
16 unsafe.

17 To the extent that an existing seal must be
18 remediated, how do we deal with the 10-foot minimum
19 requirement for seal location in the coal pillar? We
20 believe that a degree of flexibility and discretion is
21 required when making these adjustments to remediate
22 existing seals.

1 We are also uncertain, from the ETS, how MSHA
2 anticipates monitoring for methane and oxygen
3 concentrations of areas sealed prior to May 22nd, 2007.
4 If the existing sampling pipes are not functioning
5 properly, is the installation of a new pipe expected?
6 If only one pipe is in place, does the new standard
7 anticipate the installation of a second pipe? In our
8 judgment, the drilling of holes from the surface into
9 the mine for monitoring may not be a safe or advisable
10 practice.

11 New Seals: It has come to our attention that
12 MSHA is requiring a safety factor of two for seal
13 design. We question the basis for such a high safety
14 factor and whether it is truly practical and necessary
15 in all circumstances. Rather than increasing seal
16 design requirements with arbitrary and/or unspecified
17 safety factors embedded in the design and approval
18 process, we request that full details of the design be
19 made clear to designers up front, without a safety
20 factor expression. This will reduce confusion for all
21 involved.

22 Furthermore, it is important for MSHA to

1 consider the practicality and reasonableness of seal
2 design, including recognition of the types of materials
3 that are readily available in mines for the purposes of
4 seal design and construction. To set standards that
5 are out of touch with the reality of mining operations
6 will only frustrate the ability of mine operators,
7 particularly small operators, to comply with the ETS;
8 i.e., ventilate versus seal.

9 With respect to monitoring, we question the
10 value of a second sampling pipe in each seal as set
11 forth in section 75.335(d). MSHA states that it has
12 included this new provision in the ETS so that the
13 operator can obtain a more representative sample of
14 the sealed area. We question whether this is truly
15 the case. What is the basis for MSHA's belief that a
16 second pipe will provide a representative sample of the
17 entire sealed area or that the benefits would outweigh
18 the risks? We question whether the risk of requiring
19 multiple metallic conductors through every mine seal is
20 wise, from a safety standpoint, or necessary from an
21 operational perspective.

22 In its 120 psi reinforced concrete seal

1 approval document, MSHA states that a typical time
2 period for the curing of new seals is 28 days. MSHA
3 states in its preamble that the baseline sampling
4 period for gas concentrations could extend for a period
5 of 14 days or until such time as the atmosphere in the
6 sealed area is inert or the trend reaches equilibrium.
7 What happens if, during or after this time period, the
8 atmosphere is not inert?

9 Rather than engage in such an extensive
10 sampling process, which may be difficult to oversee,
11 and the need for inerting, is there the potential for
12 an alternative approach? One question -- one
13 suggestion may be to designate certain sections of the
14 mine as high-risk zones or safety zones that would have
15 limited access or may require other safeguards during
16 the time that the atmosphere is not inert.

17 With regard to the height of seals, MSHA has
18 set various upper limits in its mine seal design and
19 approval document. In some mines, the entries are
20 well over seven or eight feet high. How does MSHA
21 anticipate addressing this situation? We anticipate
22 that MSHA's reference to entry dimensions at section

1 75.336, without limitation, would allow the states to
2 address this issue.

3 With respect to how we may appropriately
4 address pressure in excess of 120 psi; for example,
5 due to anticipated pressure piling, we suggest that
6 still larger seals may not be the best answer. The
7 handling of excessive pressures can, we believe, be
8 accomplished with existing technologies and innovative
9 designs that incorporate blast-wave mitigation
10 techniques such weak-wall structures or entry geometry
11 modifications in the region just inby the seal.

12 We believe it is important to explore and
13 develop concepts such as those incorporating stacked
14 or hanging rock dust bags and/or water-filled plastic
15 tanks to provide blast-wave disruption and flame
16 quenching in the region just inby the seal. These
17 measures and techniques, we feel, will serve to reduce
18 the force and the extensiveness of an explosion before
19 it encounters the mine seal.

20 We believe that these types of mitigative
21 approaches are realistic and can serve to address many
22 of MSHA's concerns, including the uncertainty

1 associated with addressing explosion pressures by seals
2 alone. We request that specific language be included
3 to allow the development and use of such alternative
4 methods as an option for dealing with explosion
5 pressures.

6 With regard to inerting, we question whether
7 this option is always feasible, given existing
8 technologies and the availability of inerting equipment
9 in the U.S. Also, inerting may create a false sense of
10 security that there are no explosive mixtures behind a
11 set of mine seals. We know that this is not always the
12 case. In certain instances, avoiding areas near older
13 seals, altogether, as an alternative to inerting, may
14 be the safest, best solution. Establishing safety
15 zones around certain seals, as an alternative to
16 inerting, should also be considered.

17 At section 75.336(b)(2), MSHA requires that a
18 professional engineer be designated to conduct or have
19 oversight of seal installation and certify that the
20 provisions of the approved seal design have been
21 addressed. What does this require? Must the PE be
22 onsite and monitor the construction of the seal on an

1 hourly or daily basis? With regard to the certified
2 person in section 75.337(b), does a similar requirement
3 apply? Must this person be at the construction site
4 daily? When a PE is incorporating a seal design that
5 has been approved by MSHA, must the PE recertify the
6 design of the seal itself or only that it is installed
7 properly?

8 Finally, we appreciate the opportunity to
9 submit this statement today. While MSHA has made
10 significant strides in addressing the topic of mine
11 seals, we believe that additional work is needed,
12 particularly with regard to the practical application
13 of the rule and the implications of the rule for mine
14 operators and state regulatory authorities.

15 Additionally, while we recognize that *one size*
16 *does not fit all* regarding implementation of the rules
17 that apply nationwide, it is important for MSHA to
18 provide a mechanism for resolution of difference among
19 various MSHA districts regarding rule interpretation
20 and application. We would welcome an opportunity to
21 work in partnership with MSHA to address the above
22 comments and adjust the rule accordingly.

1 is in fact an effective means to arrest flame and stop
2 an explosion from propagating very far into the active
3 areas of the mine.

4 In the future, rather than categorically
5 requiring all seals of less than 50 psi design pressure
6 be retrofitted or else continuously monitored and kept
7 inert, a risk analysis approach may in certain cases be
8 appropriate to determine whether certain seals are best
9 left alone. In such cases, as Mr. Wooten previously
10 mentioned, a red zone or safety zone could be
11 established to restrict access, and appropriate changes
12 in the ventilation could be made to safeguard
13 escapeways in the ventilation system, to the active
14 sections of the mine, in the event of an explosion.

15 MSHA Rule 75.336(b)(3)(iii)(B) requires the
16 ventilation plan include safety precautions taken prior
17 to seal achieving full design strength. The Federal
18 Register preamble, on page 28808, states that such
19 safety precautions could include withdrawing miners a
20 safe distance from the seal installation site. It is
21 requested that a similar provision such as this be
22 expanded and approved as an alternate way to deal with

1 certain legacy seals that are in non-critical areas of
2 the mine.

3 My second comment today is with respect to
4 active areas of the mine where it is necessary or
5 desirable to install seal systems which can handle
6 explosion pressures of 120 psi or higher. It is
7 requested that MSHA insert a provision in the
8 regulations which both allows and encourages the
9 development of methods to achieve necessary explosion
10 protections by innovative means, other than simply
11 erecting larger and stronger seals.

12 Explosion modeling tools are now available to
13 facilitate the design and evaluation of blast-wave
14 mitigation structures, which may be used inby the seals
15 themselves to take some of the shock loading pressure
16 off the seals in an explosion. By simply disrupting
17 and/or momentarily delaying the initial blast-wave
18 with an inby weak-wall structure, the full brunt of
19 a propagating blast upon the seal may be reduced.
20 Removing this load could provide the same equivalent
21 benefit of a stronger seal.

22 The effect of explosion mitigation may be

1 enhanced further by incorporating flame retardant
2 and/or flame cooling by rock dust dispersion, water
3 dispersion, or similar counter-measures. Blast-wave
4 mitigation has the potential of being a valuable and
5 innovative tool in designing effective seal systems
6 for the future. It is recommended that engineers be
7 allowed and encouraged to pursue their development by
8 adding to regulation the necessary language to
9 specifically allow their use, provided that proper
10 documentation is developed to support projections of
11 their performance in an explosion.

12 My third comment today is with regard to a
13 possible conflict between existing West Virginia law
14 and the ETS. I will describe the conflict briefly here
15 and will suggest a possible solution. I kindly request
16 that you give this matter your careful and thoughtful
17 consideration.

18 At issue are the new responsibilities being
19 assigned to the registered professional engineer who
20 must, according to the language of the present ETS as
21 it's worded, certify all new mine seal designs and
22 certify that the seals are constructed in strict

1 accordance with the design. During the design and
2 approval process, the professional engineer is faced
3 with an ethical and legal dilemma. The seal approval
4 process, as implemented under the ETS, should
5 specifically allow the design engineer to have complete
6 direction and control over his seal design. To proceed
7 otherwise would be ill advised and quite likely in
8 violation of certain state laws and federal mandates.

9 Since the ETS requires that the engineer
10 certify his design, state law requires that he maintain
11 control over all specifications, reports, drawings,
12 plans, design information, and calculations that he
13 certifies and seals -- and seals, in this case, with
14 his professional engineer stamp. The engineer's seal
15 and signature shall be used by the registrants only
16 when the work being stamped is under the registrant's
17 complete direction and control.

18 Further, even if an engineer is checking the
19 work of an out-of-state registrant, the law in West
20 Virginia is clear that the registered engineer, quote,
21 shall completely check and have complete dominion and
22 control of the design, unquote. It cannot be said a

1 design engineer has complete dominion and control if
2 his design, when he is being -- of his design, when he
3 is being constrained to follow prescribed design rules
4 and methods that he may or may not agree with. It is
5 one thing for MSHA to advise the certifying registered
6 professional engineer what they would recommend as
7 acceptable components in the design. It is quite
8 another to make them prerequisites by MSHA for
9 approval.

10 Executive Order 13132 was issued by President
11 Bill Clinton, quote, in order to guarantee the division
12 of governmental responsibilities between the national
13 government and the states, unquote. The jurisdiction
14 over professional engineers is an issue of state law,
15 whereby policing authority is reserved to the state.
16 In section 4(c) of Executive Order 13132, it is
17 required that, quote, any regulatory preemption of
18 state law shall be restricted to the minimum level
19 necessary to achieve the objectives of the statute
20 pursuant to which the regulations were promulgated,
21 unquote.

22 MSHA has an explicit obligation to resolve

1 this conflict per section 4(d), which states that
2 when an agency foresees the possibility of a conflict
3 between state law and federally protected interests
4 within its area of regulatory responsibility, the
5 agency shall consult, to the extent practicable, with
6 appropriate state and local officials in an effort to
7 avoid such a conflict. In this case, this should
8 include both the West Virginia Office of Miners'
9 Health, Safety, and Training and the West Virginia
10 Board of Registration for Professional Engineers.

11 MSHA states in its May 22, 2007, ETS that the
12 ETS does not have federalism implications because it
13 will not have substantial direct effects on the states,
14 on the relationship between the national government
15 and the states, or the distribution of power and
16 responsibilities among the various levels of
17 government. Accordingly, under EO 13132, no further
18 agency action or analysis is required.

19 This appears to be incorrect, and it is
20 requested that MSHA recognize that, in many state
21 jurisdictions, significant federalism implications do
22 exist and that in the case of certifications by a

1 professional engineer, that the state's primacy rights,
2 in its requirement that the PE exercise complete
3 control and dominion over design, should prevail over
4 such conflicts between federal rules or policy.

5 As a solution, it is proposed that MSHA adopt
6 a performance-based regulatory approach to seal design
7 as opposed to a compliance-based approach. In this
8 context, when a regulation sets performance goals and
9 allows individuals and firms to choose how to meet
10 them, it is called a performance-based regulation.

11 I was interested and pleased to hear Ms.
12 Silvey, in her opening statement, make reference to
13 performance-based approach and would encourage
14 development of that approach in this case. In such a
15 case, in other words, MSHA would still set the minimum
16 standard for what level of performance a seal system
17 would be required to achieve. A standard could be a
18 specific pressure pulse that the seal system would be
19 designed to withstand or the system could be more
20 general, such as simply requiring operators to design
21 a seal such that would protect miners from a methane
22 explosion.

1 Significantly, Executive Order 12866, which
2 was put into effect by President Bill Clinton in 1993
3 and subsequently amended slightly in 2002 and again in
4 2007, requires that for non-independent agencies that,
5 quote, each agency shall identify and assess
6 alternative forms of regulation and shall, to the
7 extent feasible, specify performance objectives rather
8 than specifying the behavior or manner of compliance
9 that regulated entities must adopt. This is referring
10 to the performance-based regulatory approach. And
11 unquote should be after my last use of the word adopt.

12 Additional requirements outlined in EO 12899
13 include, among other things, a Regulatory Economic
14 Analysis or REA, which MSHA addressed in a prepared
15 document of approximately 70 pages. However, the MSHA
16 REA does not appear to have specifically addressed nor
17 even considered the feasibility of a performance-based
18 approach.

19 With the Agency's permission, I would like to
20 make one recommendation in this regard. Let me begin
21 by saying that foremost responsibility of the
22 professional engineers under West Virginia law is the

1 welfare of the public. A West Virginia PE must certify
2 only those designs that conform to accepted engineering
3 standards and which safeguard the life, health,
4 property, and welfare of the public. In addition, the
5 practice of engineering is a privilege as opposed to a
6 right. All registrants are required to exercise this
7 privilege by performing services only in the areas of
8 their competence according to current standards of
9 technical competence.

10 With this in mind, it is proper and justified
11 to consider, if seals must be certified, to entrust
12 the professional engineering community with the rights
13 and responsibilities of a performance-based approach
14 regarding seal design and construction. As a first
15 step toward compliance with the mandate of EO 12899,
16 which also requires a federal agency to seek views of
17 appropriate state, local, and tribal officials before
18 imposing regulatory requirements that might
19 significantly or uniquely affect those governmental
20 entities, it is requested that MSHA give full autonomy
21 to the professional engineer in the design and
22 construction aspects of mine seals.

1 In this regard, however, MSHA should make
2 available its considerable expertise in the way of
3 constructive comments to those seal applications which
4 they may review. In particular, during this transition
5 time, the knowledge acquired by MSHA in the past year
6 is a valuable asset to the industry, but in the end,
7 MSHA either should accept full responsibility for seal
8 design and certification, if certifications are
9 required, or the registered professional engineer
10 should be allowed and given the proper autonomy to
11 carry out his responsibilities in the manner that he is
12 required to under state law.

13 This concludes my comments this morning. I
14 wish to add, also, that we may be submitting written
15 comments to MSHA between now and the end of the ETS
16 comment period, both in this regard and in other
17 matters. Thank you.

18 MS. SILVEY: Thank you.

19 MR. WOOTEN: Just to follow up, Ms. Silvey,
20 if I may, we definitely will be submitting detailed
21 comments on the part of the Interstate Mining Compact
22 Commission during the comment period to hopefully

1 further expound on our brief comments this morning.

2 MS. SILVEY: Yeah, I was going to say I hope
3 both of you do, because you gave very, I think, useful
4 comments to us, and at certain points, I tried to write
5 down notes where I would ask you to clarify certain
6 things, which you could do either today or you could
7 do in comments to us in Arlington before the record
8 closes.

9 MR. WOOTEN: I think our detailed comments
10 will take care of that.

11 MS. SILVEY: Okay. Well, I want to go over a
12 couple of things though.

13 MR. WOOTEN: Certainly, certainly.

14 MS. SILVEY: And actually, either one -- you
15 don't have to do it now, because some of it I couldn't
16 -- if I had a tape, if I were like the court reporter,
17 I couldn't even keep up with it fast enough, but there
18 were some additional things that when you gave your
19 comments, I would definitely like to hear more about.

20 So first of all, Mr. Wooten, you spoke, you
21 said that, at times, certain of the provisions --
22 certain of the things that we have issued, certain

1 information out there, PIBs, I guess, and I sort of
2 lost -- compliance --

3 MR. STEPHAN: Appeals.

4 MS. SILVEY: -- yeah, appeals and maybe
5 compliance information contradict the ETS. I was
6 really going to ask you to really repeat that sentence,
7 but you don't have to repeat it. What I'm more
8 interested in is specific examples of where they --

9 MR. WOOTEN: Sure.

10 MS. SILVEY: -- where this information
11 contradicts the ETS. And so now, if you don't want to
12 repeat the statement, you don't have to do it now, but
13 I'm particularly interested in specific information,
14 specific examples of where certain information out
15 there contradicts the ETS, and quite honestly, what is
16 our information, or as you later -- both of you later
17 went into, what is certain state provision or anything
18 like that, if you would provide that to us. Because I
19 want to say on behalf of MSHA and for everybody and
20 for all the states here -- I know we have at least one
21 other state here and maybe more than that -- that we
22 are very interested in working with the state. I mean

1 we must work with the state, because one of the things
2 we want to do is to develop a final rule, as I said in
3 the opening statement, that is as protective as it can
4 be, but at the same time, that obviously can be
5 feasibly implemented.

6 So I mean, that's our goal here, so to that
7 extent, we've got to work with everybody here to try
8 to do that, and also, as I said earlier, we need as
9 specific information as possible. Because oftentimes
10 -- you know, I've been doing this a long time; some
11 people would say too long, and oftentimes what you do
12 is you do get people to give you general comments, but
13 then when it's incumbent upon you to develop this --
14 the Agency to develop the final rule, you've got to
15 translate the general comments into something, and I
16 know some of you know what I'm talking about.

17 So to the extent that you can provide us with
18 the specifics on your comments -- and now I'm jumping,
19 quite honestly, to the end here, Mr. Hieb, and to say
20 that one of the things, when you talked about a
21 performance-based approach for the approval of seal
22 design, I would ask you to provide us with specific

1 alternative language for this. I mean, you gave sort
2 of an example of what it could be, it could reflect
3 this or it could, but it you could be -- if you could
4 craft a standard. I mean if you could be as specific
5 as you can, and I say this to everybody here, when you
6 are giving us comments, if you've given us -- because
7 we did ask for certain alternatives in certain things.
8 But I'd ask you to be as specific as possible.

9 Now to continue on, both of you, Mr. Wooten
10 and Mr. Hieb, spoke of assessment of risk with respect
11 to existing seals, that in certain cases that that
12 should be an assessment of the risk to determine
13 whether the seal should be remediated or that remedial
14 action should be taken, and I believe, Mr. Wooten, you
15 gave some criteria for this assessment of risk. You
16 gave the location of the seal, I think, you know, the
17 level of the atmosphere. I didn't quite write all of
18 that down, but in terms of what this -- how this
19 assessment of risk should be done, if you should be --
20 if you can be specific about when the assessment of
21 the risk should be done, by whom, how, what's to be
22 included in it, that would be -- we would appreciate

1 that, too.

2 You asked a question about the sampling of
3 seals. I think you asked a question about the second
4 sampling pipe for seals that were constructed before
5 May 22, 2007.

6 MR. SHERER: There's no requirement.

7 MS. SILVEY: There's no requirement for a
8 second sampling pipe for those seals, the ones
9 constructed before. I believe that was one of the
10 questions, before May 22, 2007. For a new seal, and
11 some of you tech support people here, don't sit back
12 silently now here if I give the wrong -- if I make a
13 mistake here. For new seals, you said that MSHA was
14 requiring a safety factor of two and that you thought
15 that that was unnecessary, and you know, maybe I'm
16 misspeaking here, and I tell you all, if I'm
17 misspeaking, I correct the record, and I don't -- maybe
18 MSHA is requiring a safety factor. I didn't think MSHA
19 was requiring a safety factor of two, so maybe if you
20 want to clarify that right now, or if you want to
21 submit that in the record, you can do it however you
22 want it.

1 MR. WOOTEN: We'll definitely submit a
2 response on the record, but let me say, Ms. Silvey,
3 that it was our understanding, and basically what my
4 statement addressed was, if there is a safety factor
5 of two, if a 50 psi seal is really a hundred psi, let's
6 say so.

7 MS. SILVEY: I don't disagree with that.

8 MR. WOOTEN: Okay.

9 MS. SILVEY: But I'm just saying it wasn't my
10 understanding that we were requiring a safety factor of
11 two. And then you also questioned the value of the
12 second sampling pipe, and you gave some rationale for
13 questioning it in your statement, Mr. Wooten, but if
14 you have any additional information on why you question
15 the value of the second sampling pipe -- and some of
16 this information, if anybody in here has some of the
17 same comments as Mr. Wooten and Mr. Hieb, if you would
18 file, you know, some of the -- if you would listen to
19 me and act accordingly. Actually, I think you talked
20 about the risk of having a second sampling pipe there.
21 Then you talked about the period for inerting
22 and that you thought there could be alternatives to

1 inerting, and you went into -- you included some
2 information on that, but I would ask you again if, in
3 terms of alternatives to inerting, if you would include
4 specifics on that, too. And while you are doing that,
5 address both the risks that these alternatives would
6 address. I mean talk about the risks that they -- how
7 they would be as effective as the inerting.

8 And then you talked about the greater than
9 120, and I had asked that, as most of you know, in my
10 opening statement. You talked about addressing greater
11 than 120 psi, and I would ask you there if you could
12 be specific in your approach for addressing greater
13 than 120 psi. Back to inerting, when we talked about
14 inerting, you talked about there could be problems
15 associated with inerting. I would ask you to be
16 specific there with respect to what these problems are.

17 And you, Mr. Hieb, when you mentioned yours,
18 you were talking about that you thought that with
19 respect to seal, that there could be a safety zone and
20 restricted access instead of doing certain specific
21 action that we require in the rule, in the ETS. So I
22 would ask you to be specific in terms of what you are

1 talking about with respect to this safety zone. What
2 would this safety zone be, and how would you go about
3 prescribing restrictive access to the safety zone? And
4 the same comment I made earlier about the risk analysis
5 approach.

6 Also, when you were talking about that, you
7 were talking, particularly, you were talking about for
8 non-critical areas of the mine, and if, you know, if
9 we've got to do all of this, take some of this
10 information into consideration, then you've got to
11 tell me what you are talking about with respect to
12 non-critical areas of the mine, if you could be a
13 little bit more definitive with respect to what you are
14 talking about.

15 I guess the last, biggest comment that you
16 made, and which we take very seriously, was the comment
17 with respect to the professional engineer and the
18 responsibilities of the professional engineer. And I
19 would say -- the first thing I would say, you gave us
20 that, and that's good. I like that you did that. You
21 gave us that the solution would be for us to adopt a
22 performance-based approach. Well, there, the only

1 thing I would say there is like I said earlier, if you
2 would be specific in terms of your approach to this
3 performance-based approach -- no pun intended, but you
4 know, your suggestion for that. And one of the things
5 we had in mind when we talked about this professional
6 engineer was indeed that the mining community would be
7 innovative and come up with designs that MSHA would
8 approve, sort of a two-step process, that we would
9 approve at the design process, at the first stage, and
10 then we would approve in the mine, at the site
11 installation process. If we -- and I see that. You've
12 told me that in your comments, that you see some
13 problems with the way we crafted the design approval
14 part of this. As I said, I would suggest to you that
15 you let us know in terms of alternative language
16 suggestions you have for that, and then we would
17 obviously take your comments into consideration, what
18 you said about the professional engineer this morning.

19 Do any of my colleagues have --

20 MR. SHERER: I have a couple of --

21 MS. SILVEY: Yeah, please do.

22 MR. SHERER: Okay. First of all, I want to

1 thank you gentlemen for taking the time to prepare
2 your comments, and I think you brought out a lot of
3 interesting things that we do need to consider. I have
4 several questions and then comments myself, based on
5 your comments.

6 The first one is just a warning. We did not
7 have any requirements for remediation of existing
8 seals, any requirements to put sampling pipes in
9 existing seals, and I caution everybody to be extremely
10 careful around existing seals, seals built prior to May
11 22nd. We have had problems, as you know, with Darby,
12 so be extremely careful, and if you have questions,
13 contact us. We'll be glad to discuss those sorts of
14 issues.

15 The second one is you mentioned one thing,
16 Mr. Hieb, that got my attention, that we should look
17 at changes in ventilation outside of sealed areas, and
18 I would certainly appreciate any additional comments
19 you may have on that, and in particular, the strength
20 of the ventilation controls. We've seen when seals do
21 fail that there is massive damage to the existing
22 ventilation controls outby those seals, so any comments

1 you may have on that would certainly be appreciated.

2 The second one is you mentioned that there
3 is software. I think you mentioned it as blast-wave
4 software. Any experience and comments you may have on
5 that would certainly be appreciated. We're just trying
6 to get up to speed on that ourselves.

7 And the third comment and last comment was
8 again on professional engineers, is how you would
9 recommend that we could come up with a workable system.
10 We have had a lot of problems with professional
11 engineers in the past. Some are much better than
12 others. There's an issue of the low cost supplier of
13 that service, and sometimes they're -- you get what you
14 pay for. So how would you recommend that we approach
15 that?

16 Another related issue is registration of those
17 professional engineers. As a federal agency, we don't
18 have a lot of experience with state-based registration
19 of professional engineers. We do know that it is a
20 state function. Should we require those engineers to
21 be registered in the state where the seals are
22 constructed? So any comments along those lines would

1 again be of great help to us.

2 MR. WOOTEN: If I could just follow up for
3 just a second, Ms. Silvey --

4 MS. SILVEY: Yes.

5 MR. WOOTEN: -- just to correct the record on
6 -- as it regards my statement. We regarded the lack of
7 remediation requirements as a positive.

8 MR. SHERER: Okay.

9 MR. WOOTEN: Secondly, the reference to
10 sampling pipes in old seals, we were more concerned
11 about those that were not working, which I would assume
12 would have to be handled through the ventilation point.
13 We thank the panel.

14 MS. SILVEY: And again, I want to thank you
15 all. As I said at the beginning and as Erik said,
16 you've given us a lot of constructive comments, and so
17 to the extent that you can -- we do appreciate it, and
18 I want everybody here to know that we appreciate their
19 comments, and we appreciate -- we will, all comments
20 that will be given to us, and to the extent that you
21 can be even more clarifying and specific, that would
22 just be helpful to us as we go to the final rule.

1 MR. WOOTEN: Thank you. We'll do so. We
2 appreciate your time.

3 MS. SILVEY: John Gallick with Foundation
4 Coal. Excuse me, it seems like -- I'm sorry. I don't
5 generally do this. People who know, who've done
6 hearings with me sort of know that. Maybe we should
7 take a five-minute break now. But please no longer
8 than ten minutes.

9 *(Brief recess in proceedings.)*

10 MS. SILVEY: We will now reconvene the Mine
11 Safety and Health Administration public hearing on
12 seals. Next we will hear from John Gallick with
13 Foundation Coal. Mr. Gallick.

14 **JOHN GALLICK**

15 MR. GALLICK: My name is John Gallick,
16 G-A-L-L-I-C-K, and I'm testifying on behalf of
17 Foundation Coal Corporation, and its affiliates.

18 Foundation Coal Corporation and its affiliates
19 offer the following comments to the Mine Safety and
20 Health Administration concerning the Emergency
21 Temporary Standard for sealing of abandoned areas
22 published on May 22nd, 2007. Foundation Coal

1 Corporation's affiliates operate underground mines in
2 Pennsylvania and West Virginia, as well as surface
3 mines in West Virginia and Wyoming.

4 First, I want to thank you for extending the
5 written comment period so we can respond in more detail
6 to this proposed rule. The Agency's actions on sealing
7 of abandoned areas epitomizes the issues the industry
8 has faced during the last 18 months.

9 In June and July of 2006, the Agency published
10 program information bulletins P06-12 and P06-16 that
11 essentially changed the standard for alternate seal
12 construction from a 20 psi standard to 50 psi and added
13 requirements for sampling inside of sealed areas.
14 These program information bulletins ignored standard
15 rule-making procedures in favor of policy enforcement.
16 Clearly, if there was a need for immediate action on
17 sealed area safety, issuing an emergency temporary
18 standard would have been justified at that point in
19 time, not in May of 2007. For various reasons, the
20 Agency was not challenged on its use of program
21 information bulletins to establish rules and
22 regulations.

1 Well, what was the outcome of these program
2 information bulletins? First, the sampling procedures
3 and protocols to be used by the agency were never
4 published. Second, the Agency had no 50 psi alternate
5 seals available for use, and none were timely
6 forthcoming. This left the industry in a total
7 quandary.

8 Fortunately, Mitchell-Barrett block seals were
9 in the regulation and could be installed in most mines
10 without waiting for an alternate seal design to be
11 approved. One of our operations was forced to scramble
12 and install 92 new Mitchell-Barrett seals, most of
13 these in front of previously approved alternate seals.
14 This was done to comply with program information
15 bulletin P06-12 and P06-16. Frankly, the installation
16 of Mitchell-Barrett seals were the suggestion of your
17 Agency, so that this issue would be over with and we
18 could move forward with all the other issues we had to
19 comply with.

20 Is that the end of the story? No. Actually,
21 the publishing of this Emergency Temporary Standard
22 was, as Yogi Berra was supposed to have said, déjà vu

1 all over again, only worse this time. The Emergency
2 Temporary Standard was published without an MSHA
3 sampling protocol. There were no 120 psi seals
4 available for use, and like the program information
5 bulletins of a year ago, the Mitchell-Barrett seals has
6 been deleted from history. Thus the same operation
7 that scrambled to comply last summer with the program
8 information bulletin publications is now scrambling to
9 build a third set of seals and in some areas a fourth
10 set of seals.

11 It is unbelievable that this Agency, which was
12 given leeway by the industry to enforce and properly
13 develop program information bulletins last summer and
14 which had a mandate from Congress in the MINER Act,
15 to complete a final regulation using the normal rule-
16 making process and to complete this by December 15th
17 of 2007, would instead choose the Emergency Temporary
18 Standard method for rule-making. By choosing this
19 path, the Agency has set in motion confusion throughout
20 the industry. The industry in general, and my company
21 in particular, has been forced to again scramble to
22 attempt to comply with a set of regulations published

1 without any lead time prior to enforcement. These
2 public hearings will not clear the confusion and
3 turmoil this Agency has caused by failing to follow
4 the normal rule-making process and the timelines
5 established in the MINER Act. I only hope that the
6 final regulation will clear up some of the confusion
7 that now exists.

8 I will now address some specific comments on
9 the proposed regulation. The proposed regulation
10 requires three levels of seal designs. Foundation Coal
11 will respond in detail concerning seal designs in our
12 written comments. Today I only want to comment on the
13 exclusion of the Mitchell-Barrett seal from the
14 proposed regulation.

15 Mitchell-Barrett seals have been in use
16 throughout the industry and was the only design written
17 into regulation. This design has, over time, been
18 rightly called the gold standard for seal construction.
19 NIOSH has tested and published reports on Mitchell-
20 Barrett seals. NIOSH has found in their explosion
21 gallery tests that Mitchell-Barrett seals are capable
22 of withstanding overpressures of above 95 psi. An

1 engineering group of the West Virginia Office of
2 Miners' Health, Safety, and Training, which just spoke,
3 has recently reached the same conclusions. Clearly,
4 this seal design would have been sufficient for all
5 explosions inside the sealed areas that have been
6 reported by MSHA.

7 For these reasons, I urge you to reinstate the
8 Mitchell-Barrett design into the proposed regulations.
9 This design has a long history of providing a safe
10 separation between a sealed area and the active mines.
11 When properly installed in normal mining conditions,
12 there is no history of catastrophic failure of
13 Mitchell-Barrett seals.

14 I would like to recommend a clarification
15 concerning the weekly sampling requirements for seal
16 lines. The Agency recognizes the need for sampling to
17 occur when the barometric pressure is decreasing or the
18 seal is outgassing, yet requires a sample on a weekly,
19 and I read that to mean every-seven-day basis. The
20 regulation should state, instead, that a sample should
21 be taken on a calendar weekly basis. This will allow
22 flexibility in sampling time. The preamble, on page

1 28800, implies that the examination time should be
2 based on, quote, barometric conditions to the extent
3 possible, unquote. The Agency assumes that this sample
4 will be coupled to the weekly examination; therefore,
5 the every-seven-day standard would not be an issue.
6 That scenario is likely to be the case in most
7 operations; however, by providing the flexibility of
8 using a calendar week rather than the every-seven-day
9 standard for conducting this sampling, provides the
10 operator an option to sever the weekly sampling
11 requirements in 75-360 and 75-364 from the sampling
12 requirements that are listed in 75.335(b)(1). There is
13 no safety concern with calling for a weekly sampling
14 regimen rather than insisting upon sampling every seven
15 days.

16 Next, I believe the proposed rule fails to
17 consider the totality of the sealed areas as it relates
18 to sampling. We have been told that any one sampling
19 location in a sealed area, regardless of the size of
20 the sealed area, will result in an action plan
21 implementation, including the possible withdrawal of
22 people. The Preamble, again on page 28802, discusses

1 MSHA's opinion that leakage into sealed areas as a
2 result of barometric changes, would not, quote,
3 significantly impact the atmosphere in a large portion
4 of the sealed area, but it may affect the atmosphere at
5 a sampling location where the seal is ingassing.
6 Therefore, it is important that samples be
7 representative of the atmospheric conditions in the
8 larger portion of the sealed area rather than just the
9 area immediately inby the seal, unquote.

10 The preamble acknowledges the need to review
11 the entire sealed area, yet the action plans and
12 sampling protocols ignore borehole data that can
13 provide a clearer picture of inertness of the entire
14 sealed area. The regulation should allow for the use
15 of borehole samples as a means of establishing a
16 condition of the entire sealed area and not rely on an
17 action plan based on one seal set in a large number of
18 seals.

19 Concerning training, I applaud the Agency's
20 desire to develop a regulation for the training of
21 certified persons using a performance standard. I
22 would like to have the Agency clarify that, even though

1 the training is required for certified persons assigned
2 to sample seals, there is no need or requirement to
3 change or modify Part 48 Training Plans.

4 Continuing on my discussion of sampling issues
5 in the proposed regulations, I want to comment on the
6 action levels, particularly the safety factor built
7 into the Emergency Temporary Standard regulation. The
8 gas action levels listed in the Emergency Temporary
9 Standard mirror the gas levels used in the July 2006
10 program information bulletin. While providing a safety
11 factor for hand-held sampling may be understandable,
12 the failure to acknowledge a chromatograph reading to
13 determine inert levels is not understandable.

14 The regulation should allow for narrowing of
15 the safety factor when follow-up chromatograph samples
16 are taken. This is how the system works for other gas
17 readings taken by MSHA inspectors and should be
18 provided for in this regulation. A chromatograph
19 reading of oxygen below 12 percent levels should be
20 considered inert. Methane levels should only require
21 action from 4 percent to 16 percent levels.

22 I would suggest that the regulation should

1 read as follows: The atmosphere should be considered
2 inert when (1) the oxygen concentration is less than
3 12 percent, (2) the methane concentration is less than
4 4 percent, or (3) the methane concentration is greater
5 than 16 percent.

6 I agree with the proposed regulation to
7 provide an opportunity for additional samples to verify
8 an initial sample of concern. I would first reduce the
9 sampling concentration of concern to a sample of 12
10 percent oxygen or greater and a methane concentration
11 of from 4 percent to 16 percent. Then, rather than
12 rely on two additional samples at one-hour intervals, I
13 would require additional samples over a 24-hour period.
14 Taking two additional samples over one-hour intervals
15 does not provide sufficient time for a sealed area to
16 equalize after a barometric swing. In addition, as I
17 stated earlier, a bag sample can be taken and analyzed
18 for verification of the hand-held samples during this
19 longer period of additional samples.

20 Also concerning sampling, the Emergency
21 Temporary Standard requires operators to submit their
22 sampling protocol to MSHA. Neither the regulation nor

1 the preamble discusses the Agency's sampling protocol.
2 We have been asking for a written protocol from the
3 Agency -- that the Agency intends to use, since the
4 sampling program information bulletin was issued a year
5 ago. We have heard about or have seen various
6 inspectors' attempts to obtain a bag sample for
7 chromatograph analysis. These systems have ranged from
8 a revamped ELF dust pump with attachments to placing a
9 rock-dust sampling bag over a sampling port and trying
10 to insert a bottle sample in the bag.

11 I would like MSHA to provide the Agency's
12 sampling protocol to be used by MSHA inspectors. This
13 doesn't need to be part of a regulation, but it should
14 be made available to interested parties for comment.
15 For example, will MSHA rely strictly on a hand-held
16 sample, or will a bag sample be used for confirmatory
17 chromatograph readings? If a confirmatory sample is to
18 be taken, what pump system does MSHA plan to use? The
19 industry has a need to understand what protocol the
20 Agency intends for its inspectors to follow.

21 Next, I'd like to comment on the action plans
22 and the use of the term, affected area. I would expect

1 MSHA's review of affected area to be based on more than
2 a generalized cookbook formula and that mitigating
3 systems be permitted to minimize the area listed as
4 affected. For example, rock dust and/or water bags
5 added to the active side of the seal can act to reduce
6 explosion forces. These types of actions taken by an
7 operator should be considered when establishing an
8 affected area. I have heard of districts stating that
9 the entire mine is affected, yet the regulations
10 clearly contemplate allowing for operating under an
11 action plan.

12 I'd like to briefly comment, also, on the use
13 of artificial inerting. Foundation Coal plans to
14 comment more extensively concerning inerting in its
15 written comments. From our review of inerting, it is
16 clear that experience in the United States with
17 nitrogen or carbon dioxide gas inerting is generally
18 limited to mine-fire-type activities. The use of gases
19 to inert sealed areas other than mine fires generally
20 involves the control of spontaneous combustion.

21 In mines where inerting is done for
22 spontaneous combustion control, typically, a pipeline

1 is used to carry the gas to the seal line, and gas is
2 pumped through the seal. There is no attempt or
3 logical reason to try to pump an entire sealed area
4 with nitrogen or carbon dioxide. Yet we are hearing
5 that districts are requiring mines who choose to pump
6 gases into sealed areas as a means of inerting, to
7 drill a borehole at the deepest end of the sealed area
8 and begin pumping from that location until the nitrogen
9 or carbon dioxide areas appears -- carbon dioxide
10 appears at the seal line. If a drill site cannot be
11 set up in the deepest area of the sealed area in
12 question, then some mines are being told that a one-
13 for-one exchange of volume in the sealed areas must be
14 pumped to prove an inert atmosphere. This does not
15 make sense.

16 Pumping the entire sealed area in a one-for-
17 one exchange of gases requires an inlet or an outlet
18 borehole. In either case, this minimizes the value of
19 carrying a pipeline underground to provide inert gases.
20 Why do that if boreholes will still need to be drilled
21 into the sealed area? Logically, the goal should be to
22 provide artificial inerting by pumping nitrogen or

1 carbon dioxide at the seal line so that, at a minimum,
2 a buffer zone of inert atmosphere is in place inby the
3 seal line.

4 Next, the prohibition of burning or welding
5 within a 150 feet of sealed areas need to be
6 reconsidered. The application of the prohibition of
7 cutting and welding within 150 feet of a seal may not
8 be entirely enforceable or can cause great interruption
9 in some mines, where the next entry or two entries over
10 from the seal contains a pre-existing belt, belt-drive,
11 shop area, travelway, or track.

12 There is no grandfather clause in this rule
13 for these situations. If additional new seals, as
14 anticipated by the standard and being required in the
15 new Emergency Temporary Standard plans are to be built,
16 and there's not adequate space in front of existing
17 seals, the new seals may be placed within 150 feet of
18 the existing areas listed above.

19 The standard where the 150-foot distance comes
20 from, the permissible equipment zone near gob lines,
21 is of a completely different nature from the seal
22 situation. In the 150-foot gob scenario, the hazard

1 is that there are generally no permanent ventilation
2 structures between the gob and the permissible zone,
3 so that any of a number of incidents, such as gob
4 reversal, low gob pressure, large roof falls pushing
5 out gob air, could result in gob air carrying methane
6 to the work area. In areas where seals -- in areas
7 around seals, there are definite airflow patterns,
8 separated by permanent ventilation devices that are
9 designed to carry away any outgassing from seals. A
10 standard for welding and cutting near seals may be
11 necessary, but using the 150-foot prohibition
12 requirement is not appropriate.

13 I'd also like to comment on a proposed rules
14 requirement for certifications. This certification
15 goal should be twofold. One is to have properly
16 designed seals -- a properly designed seal that is
17 appropriate for the mining conditions. That is the
18 logical province of a professional engineer. Once the
19 design is developed and submitted, the professional
20 engineer's job should be ended. Unless there is an
21 issue with the application of the agency, such as
22 missing information, for example, that application

1 should then be approved.

2 The second goal, the proper installation of
3 the seals themselves, should be under the direction of
4 certified persons and installed by trained workers.
5 There is no need for another professional engineer to
6 be involved in the construction process. Seal
7 installations can involve a significant number of days
8 to complete. A professional engineer is not needed as
9 an onsite observer of this construction.

10 As stated earlier, my company intends to
11 provide additional written comments on this regulation,
12 including responding to your questions and requests in
13 the preamble. I do have one question for you, though.
14 I would like to know if it would be possible to have a
15 list of the mines that have been affected by this
16 standard to date, the number of mines, and the names of
17 the mines that have been affected. I know at least one
18 of my mines have been. Thank you for your time and for
19 allowing me to comment on this hearing -- at this
20 hearing.

21 MS. SILVEY: Okay. Thank you, Mr. Gallick,
22 and thank you for your comments. I do have a few

1 comments for you, even though I know you said you will
2 be providing specific answers to the questions that we
3 raised in the preamble. You wanted from us, but I'll
4 get to your question first.

5 MR. GALLICK: Okay.

6 MS. SILVEY: The mines that have been affected
7 by this ETS.

8 MR. GALLICK: Yes.

9 MS. SILVEY: And you know one of your mines
10 has been affected.

11 MR. GALLICK: Yes, ma'am.

12 MS. SILVEY: Now, when you say mines that have
13 been affected, I want to make sure we're on the same
14 wavelength. You're talking about the mines that -- one
15 of your mines is sealed right now. Is that what you're
16 talking about?

17 MR. GALLICK: Yeah, the mines I'm referring to
18 are mines that have either been shut down or --

19 MS. SILVEY: Yeah, what are you --

20 MR. GALLICK: -- inhibited from total
21 production due to areas being closed, maybe not
22 necessarily the whole mine, but various parts of the

1 mine shut down due to, either voluntarily, or at the
2 Agency's request where --

3 MS. SILVEY: Oh, I see. Okay. I'm glad you
4 explained that, because I --

5 MR. GALLICK: -- where the gas levels inby
6 the seals are such that the action plan, either they
7 voluntarily shut down, like in our case, we did, or
8 whether the Agency involuntarily shut them down.

9 MS. SILVEY: Okay. So now, just so we clarify
10 for everybody, what you really wanted to ask me was,
11 and I'm to some extent putting words in your mouth,
12 you wanted to ask me how many mines have been issued
13 citations since the ETS.

14 MR. GALLICK: No.

15 MS. SILVEY: No?

16 MR. GALLICK: No, that maybe some of the
17 mines --

18 MS. SILVEY: Well, when you said -- you said
19 shut down, so --

20 MR. GALLICK: Well, some mines have
21 voluntarily closed areas. Once our examiners find --
22 our, meaning, I'm speaking as a broad industry.

1 MS. SILVEY: Okay.

2 MR. GALLICK: Once our examiner finds methane
3 levels or oxygen levels in the action level, they have
4 withdrawn people from the mine or withdrawn people from
5 an area of the mine, which prohibits production or
6 shuts the entire mine down.

7 MS. SILVEY: Okay.

8 MR. GALLICK: I would think -- I'm guessing,
9 but I would think most of them have been voluntarily
10 done by the examiners, by the operator's examiners.

11 MS. SILVEY: Okay. Well, I --

12 MR. GALLICK: But we have no information of
13 the number and the impact of this regulation.

14 MS. SILVEY: Okay. I'll tell you the truth.
15 I can't answer that. I don't know if we've issued --
16 if any mines have been shut down now, as you put it --
17 I'll use your involuntarily or whether -- I don't know
18 what mines that have voluntarily closed down. You said
19 your mine had. Do you have this information?

20 MR. SHERER: We have issued several 107(a)
21 imminent danger orders.

22 MS. SILVEY: Yeah, I thought we had issued

1 some.

2 MR. SHERER: We can certainly provide you a
3 list of those that we have. As far as voluntary
4 shutdowns, we may not be aware of all of them. Some
5 of them we are. Some of them we may not be.

6 MS. SILVEY: That's what I would think, too.

7 MR. GALLICK: I think it would help everybody
8 as we work through the impact of this rule.

9 MS. SILVEY: Well, you know, to the extent
10 that just so everybody is on the same wavelength and
11 has the same information, at some point, we can provide
12 the list of -- I don't know whether -- see, some of the
13 same people won't be there. I don't know whether we'll
14 do it in Lexington. I don't know whether we'll have it
15 all by then, but at some point, as Erik said, we can
16 provide the list of mines that we've issued citations
17 to and then the voluntary ones, that's -- I think that
18 is another point. I don't know that we can make that
19 promise to provide information on the ones that are
20 voluntarily closed down.

21 MR. GALLICK: Well --

22 MS. SILVEY: As you are part of the mine --

1 MR. GALLICK: I would expect your districts
2 know which ones have been voluntarily shut down. They
3 certainly know ours.

4 MS. SILVEY: And then they may. You may be
5 right there. Okay. You said that, Mr. Gallick, about
6 the sampling protocol. You mentioned the Agency
7 sampling protocol, and in terms of the protocol that
8 our inspectors are going to use when they do their
9 sampling, we will -- we are going to issue shortly, I
10 believe, a procedure instruction letter which sets
11 forth the procedures for our inspectors, and obviously,
12 as with all the procedure instruction letters and
13 program information bulletins, that will be available
14 to the mining public, which sets forth the protocol
15 that the inspectors will use, and it should be very
16 shortly. And when I say very shortly, I would hope
17 that it would be within the next week.

18 MR. SHERER: I can't guarantee you any time.
19 I've been trying to get that one out since -- a long
20 time.

21 MR. GALLICK: Thank you, Erik. We certainly
22 need to know how we're going to be sampled by the

1 Agency --

2 MS. SILVEY: Yeah, we will.

3 MR. GALLICK: -- and understand it. Thank
4 you.

5 MS. SILVEY: And we appreciate that from you,
6 and quite frankly, everybody else in the mining
7 community should know how the Agency will be sampling,
8 and so we will be getting that out.

9 MR. GALLICK: Thank you.

10 MS. SILVEY: You mentioned about Mitchell-
11 Barrett and the exclusion of Mitchell-Barrett seals
12 from the ETS, but the Mitchell-Barrett seals, in terms
13 of, obviously, this ETS is crafted in a different way
14 than the existing rule -- well, not existing any more
15 but the prior seals rule. But Mitchell-Barretts, I
16 don't think are excluded from the ETS, as long as
17 Mitchell-Barrett -- and I shouldn't probably be saying
18 Mitchell-Barretts. I should probably be saying solid
19 concrete, as long as those seals meet certain
20 parameters.

21 MR. GALLICK: It's clear, though, that two
22 things. One is that the present Mitchell-Barretts are

1 given credit for 20 psi, and the NIOSH studies have
2 listed it at above 99, so it's clear that the safety --
3 Monte Hieb discussed the safety factor of two.
4 Mitchell-Barretts get a minus safety factor of five.
5 The other part of that is -- so essentially, they are
6 not going to be of any value going forward. They're
7 given no credit going in the past.

8 It's unbelievable to me that -- that has been
9 the standard sealing method and has done quite well,
10 in my opinion, and frankly, it won't meet either the
11 50 or the 120, obviously, as going forward, so you'll
12 never see another one in a mine, and I don't think the
13 Agency's thought that -- the value of Mitchell-Barrett
14 or solid block stopping, as your phrase --

15 MS. SILVEY: Right.

16 MR. GALLICK: -- properly. That's my view.

17 MS. SILVEY: Okay. Well, you know, to the
18 extent then, if you don't think we have, you provide
19 just with some -- any more details on the solid
20 concrete in terms of the --

21 MR. GALLICK: I'd be glad to, and one of the
22 things that surprised me was NIOSH had done a report

1 on various seals and had presented it, and I don't
2 have the quote exactly with me, but at an Australian
3 ventilation conference -- Erik, you probably remember
4 that -- when I looked through the issue, the reports
5 that were listed in the preamble having to -- that had
6 been analyzed as part of the rule, that report wasn't
7 in there, and that surprised me.

8 MS. SILVEY: Okay.

9 MR. SHERER: One comment I've got on Mitchell-
10 Barretts is they're just a specification, and they are
11 very dependent on the size of the opening, the strata
12 of the floor and the roof rock, so in retrospect, there
13 could be problems with certain applications. Other
14 applications may be fine. We didn't specifically
15 prohibit that. It's just that all new seals have to
16 meet performance-type specifications.

17 MR. GALLICK: I understand, and I appreciate
18 what you're saying on specific designs and how they're
19 built, et cetera. It just seemed to me that, again,
20 what was a seemingly good standard, you know, and all
21 the discussion was over alternates to that standard.
22 We threw out the initial standard as well as the

1 alternates, and I continue to have problems with that.

2 MS. SILVEY: Yeah. Mr. Gallick, you mentioned
3 about the Part 48 Training Plan, but there's not a
4 requirement in the ETS to modify the Part 48 Training
5 Plan.

6 MR. GALLICK: I realize that, but at least one
7 district has asked operations to modify their Part 48
8 program, so I decided to go on the record and get your
9 answer, which takes care of my issue. Thank you.

10 MS. SILVEY: Okay, thank you. The next thing
11 you mentioned with respect to the action plan, and I
12 sort of maybe will ask you to refresh my memory here,
13 that you said we ignored borehole data, and I'm a
14 little confused by that. I was going to ask you to
15 clarify that, or did you mean we ignored -- when you
16 say borehole data, you mean prior data that you all
17 have?

18 MR. GALLICK: I mean both.

19 MS. SILVEY: Or sampling data?

20 MR. GALLICK: I mean both. What I would say,
21 and maybe I didn't say it clearly enough, and I
22 apologize.

1 MS. SILVEY: That's okay.

2 MR. GALLICK: The large gob areas -- and I'm
3 referring to the longwall type gob areas -- typically
4 have boreholes in them, typically have multiple sets of
5 seals. We would look at that as looking at, between
6 boreholes and seals pipes, a totality of the gob
7 measurement of its inertness. Yet, from my
8 understanding of the enforcement actions, one seal in
9 that series of seals and in the boreholes, one seal
10 that falls into the action levels, that whole gob is
11 considered to be an action-level type concern, to the
12 point where, for instance, let's say I had a set of
13 seals, and two miles away I have boreholes showing
14 total inertness in that area of that sealed design. I
15 have to put 120 psi seals around the entire perimeter,
16 including areas that are clearly inert.

17 Most of the time, what you're seeing at that
18 seal line is some kind of influence, I'll use the term,
19 of either the active side of the mine's ventilation
20 system, the fan influence, or breathing in that area
21 for some reason. I think, and I won't ask anybody to
22 respond to that, although you know who I'm looking at,

1 the totality of the gob, I think, is not in question.
2 I think it's clear that that's an inert gob -- I mean
3 inert seal area. Excuse my change of choice of words,
4 an inert seal area. Yet, as I read the rule, I would
5 have to treat that whole area as non-inert, and if I
6 wanted to add 120 psi seals to make it go away, and
7 that's all -- one of my concerns. I think we need to
8 be looking at totality of sealed areas, not individual
9 seal readings, especially when we're talking a 15-foot
10 pipe, or you know, a 15-foot pipe should not be the
11 measurement for a large acreage of sealed area.

12 MR. SHERER: One comment I've got on that,
13 Mr. Gallick, is the most common borehole, of course,
14 is a gob ventilation hole, and our experience is those
15 have almost no correlation to what's going on down in
16 the area that is sealed.

17 MR. GALLICK: Uh-huh.

18 MR. SHERER: It's a gravity fractionation of
19 the methane. That's what allows you to pull almost
20 pure methane off of those. We do have the same
21 concerns. It's certainly something that we're trying
22 to dig into right now ourselves.

1 MR. GALLICK: And I can appreciate that, and
2 I appreciate you being concerned about it in terms of
3 when we put our written comments together. I do
4 believe, for instance, we would put in -- you know,
5 right now we use those holes because they're there.

6 MR. SHERER: Sure.

7 MR. GALLICK: But going forward, we may put a
8 hole in another location if it would help satisfy a
9 sampling standard so that we wouldn't be in this
10 concern.

11 MS. SILVEY: Or, if you, as we thought -- we
12 were hoping to try to do when we structured the ETS, to
13 get a more representative sample.

14 MR. GALLICK: Right.

15 MS. SILVEY: Of the entire area.

16 MR. GALLICK: Right.

17 MS. SILVEY: With respect to your comment on
18 the prohibition of welding or cutting, the only thing
19 I do here is reiterate what I said in my opening
20 statement, if you have alternatives, if you would get
21 specific language, and with the specific language, if
22 you would get specific support. And when I say that, I

1 mean if you have an alternative about how it addresses
2 the risk and that type of thing.

3 MR. GALLICK: That should be no problem.
4 We'll do that.

5 MS. SILVEY: Okay.

6 MR. SHERER: I can say that we are trying to
7 address that specific issue and some current questions
8 and answers, and we hope we'll have it resolved very
9 soon.

10 MR. GALLICK: I hope so. Thank you.

11 MS. SILVEY: And the last thing I have is on
12 the, again, on the certification of the -- by the
13 professional engineer. I believe I understood you to
14 say that there was no need for the PE to be involved
15 in the installation process.

16 MR. GALLICK: That's correct.

17 MS. SILVEY: Okay, and you think that that's
18 sufficiently handled by the certified person?

19 MR. GALLICK: I believe that's, as I said, a
20 twofold process. The PE makes sure that the design
21 fits the area that it's going to go into in the mine.
22 Once all that is done and it's approved, and everyone

1 agrees that that model of seal, and this is how it's
2 going to be installed -- it meets it, then it becomes
3 the province of the operations, the certified people
4 and the installers, to install it properly. My concern
5 is that a PE will get tied up on day-to-day reviews of
6 seals, and some of our seal projects go on for months.

7 MS. SILVEY: Okay.

8 MR. GALLICK: And that PE does not need to be
9 trying to get in there and look at construction. That
10 should be the certified person and the trained
11 installers putting it in properly.

12 MS. SILVEY: Well, let me make sure I
13 understand you, though. Is your concern in terms of
14 just the logistics, the time, and the whatever of that
15 that's necessary for the PE, or is your concern that,
16 going into the installation, the construction and
17 installation, is not the proper province of the PE? I
18 mean which is it? I'm sort of hearing a little bit
19 of --

20 MR. GALLICK: I'm more concerned about the
21 former than the latter.

22 MS. SILVEY: Okay.

1 MR. GALLICK: The PE's -- the PE, obviously --
2 I shouldn't say obviously. Many PE's are also quite
3 capable of going in and doing the lead on a
4 construction, being a construction foreman. I'll use
5 that term. You certainly don't have to be a PE to be a
6 good construction foreman.

7 MS. SILVEY: Okay.

8 MR. GALLICK: And that's what he's there for
9 is to make sure it's installed right.

10 MS. SILVEY: Okay. Anybody? Do you have any
11 more? Okay, thank you, Mr. Gallick. Thank you very
12 much.

13 MR. GALLICK: Thank you.

14 MS. SILVEY: Next we will hear from R. Henry
15 Moore, Pennsylvania Coal Association.

16 **R. HENRY MOORE**

17 MR. MOORE: Thank you. I'm R. Henry Moore of
18 the law firm, Jackson, Kelly, PLLC, and we have the
19 privilege of being outside safety counsel for the
20 Pennsylvania Coal Association. We are pleased to offer
21 comments on the proposed rule. PCA is an association
22 that represents the majority of bituminous coal mines

1 in Pennsylvania, and it represents operators of both
2 large and small underground bituminous coal mines.

3 The Pennsylvania coal-mining industry has a
4 long history of developing large mines without sealing
5 up until 19 -- the early 1990s we were not permitted to
6 seal. This helps us have a perspective on the
7 significant safety benefits of sealing abandoned areas.
8 We are concerned that MSHA has lost sight of the
9 benefits of not having large abandoned areas of
10 underground coal mines that must be inspected and
11 ventilated. It is a significant safety benefit not to
12 have to inspect such areas. It is also a significant
13 safety benefit to have these areas sealed and allow
14 them to become inert. We believe the Agency has lost
15 perspective with respect to the atmospheres that may
16 be contained behind seals. In so doing, the Agency has
17 created what can only be considered as regulatory
18 chaos.

19 We recognize that the explosion at Sago was a
20 terrible tragedy, but we also recognize that it was in
21 many ways an aberration and that this subject requires
22 measured and considered action by the Agency.

1 Unfortunately, the scope of that tragedy appears to
2 have caused the Agency to ignore law and proper
3 procedure. The best example of this was when the
4 Agency improperly increased the requirement for
5 alternative seals from 20 psi to 50 psi by use of a
6 policy document last year, program information bulletin
7 P06-16, without the benefit of notice and comment rule-
8 making, and frankly, without the benefit of the use of
9 the Emergency Temporary Standard process.

10 The dangers of such approach were also
11 exemplified by the fact that there were two very
12 significant errors in the ETS that we have found so
13 far. The ETS eliminated the previous seal criteria in
14 section 75.335(a), making it questionable as to whether
15 MSHA inspectors can site defects in the construction of
16 seals built prior to May 22nd, 2007, but cited after
17 that date. That standard no longer exists.

18 An even more significant error was the
19 insertion of the requirement that no cutting or welding
20 be conducted within 150 feet of seals. The application
21 of that prohibition of cutting and welding within 150
22 feet of a seal failed to consider existing arrangements

1 where the next entry or two entries over from the seal
2 contains a pre-existing belt drive, belt, shop area,
3 or track. The prohibition also failed to consider
4 ventilation arrangements in western mines with a
5 longwall. There for the purpose of controlling
6 spontaneous combustion, the gob isolation stoppings
7 behind the longwall face are within 150 feet of the
8 tail drive of the longwall. This means that cutting
9 and welding cannot be performed on a longwall face
10 where gob isolation seals are used. This sort of
11 requirement is untenable. It is these types of errors
12 that notice and comment rule-making would have
13 eliminated.

14 The haste is also exemplified by the totally
15 unrealistic approach that MSHA has taken to the
16 designing of seals. The seals initially on the website
17 were entirely impracticable for installation, and as
18 of last week, if I understand correctly, one of the
19 seal designs for 120 psi seals had improper drawings
20 attached to it. But the Agency's failure to follow a
21 rational development of a new rule, which was
22 contemplated, as we see it, by the MINER Act, has been

1 compounded by the enforcement approach the Agency has
2 taken before and after the issuance of the ETS.

3 For example, once the ETS was issued,
4 inspectors fanned out across the coal fields, shutting
5 down coal mines for levels of methane that were
6 considered by MSHA to present, not very long ago, no
7 appreciable hazard. Last year, as Mr. Gallick
8 commented, District 4 forced one mine in West Virginia
9 to install 90 or more new seals to replace what had
10 previously been an acceptable alternative seal design.
11 Then when the ETS was issued, it targeted that mine
12 for enforcement and utterly failed to consider the
13 installation of those new seals. Those seals were
14 Mitchell-Barrett seals which are tested out to 90 to
15 100 psi, but which the Agency now says are 20 psi
16 seals. The Agency has refused to accept NIOSH testing
17 that proves otherwise, in failing to recognize the
18 absence of the failure of such seals in this country in
19 any explosion that PCA is aware of.

20 In other instances, the Agency has required
21 operators to totally replace the atmosphere in a sealed
22 area with nitrogen. One mine in Pennsylvania was told

1 it had to replace the three million cubic feet of air
2 in the sealed area with three million cubic feet of
3 nitrogen. In requiring such action, can the Agency
4 definitively predict where the mine atmosphere in the
5 seal area will travel once it is displaced by the
6 nitrogen and once forced out of the sealed area,
7 whether it will create unintended adverse safety
8 impacts in other areas of the mine? We believe also
9 the same scenario has now happened in a second mine in
10 Pennsylvania, and for the sake of correctness, the mine
11 that was told to replace the three million cubic feet
12 was fortunate, and the atmosphere became inert,
13 naturally.

14 The Agency has also sent inspectors out to
15 measure the amount of mortar between joints and
16 existing seals. These inspectors have applied
17 criteria, unknown and unannounced to the industry where
18 the seals were built, to the thickness of the mortar.
19 The abatement of such conditions required by inspectors
20 included replacement of the seals.

21 One significant problem as we see it with the
22 Agency's regulatory and enforcement approach has been

1 to cause miners to lose confidence in the judgment of
2 both the Agency and the operators. How can an operator
3 convince its miners that the mine is safe, when one
4 minute it yanks the miners out of the mine because of
5 a purported imminent danger behind the seals, and the
6 next, yanks them out of the shower to go back in the
7 mine because MSHA said it's okay now?

8 One problem, of course, is that in the
9 proposed rule, the Agency has treated the presence of
10 methane behind the seals in an explosive range as an
11 imminent danger. Except under highly unusual
12 circumstances, the presence of methane, even in the
13 explosive range, does not constitute an imminent danger
14 because of the absence of ignition sources in the
15 presence of seals. MSHA itself has recognized this
16 over the years.

17 The proposed rule, in section 75.335(b)(4)(ii),
18 apparently seeks to eliminate the provisions of section
19 107(a) of the Act, and the burden it placed on MSHA to
20 actually establish that an imminent danger existed.
21 Section 3(j) of the Act further defines an imminent
22 danger as the existence of any condition or practice in

1 a coal or other mine which can reasonably be expected
2 to cause death or serious physical harm before such
3 condition or practice can be abated. The mere presence
4 of methane in the explosive range behind seals does not
5 rise to that level. In fact, the Secretary standards
6 contemplate that methane will be present in the sealed
7 area. Section 334 requires that worked out areas be
8 ventilated to dilute and move methane air mixtures to a
9 return or that they be sealed; i.e., the methane will
10 be behind the seals.

11 The reason methane behind seals should not be
12 treated as an imminent danger is that in addition to
13 having methane in the explosive range, it is necessary
14 to have an ignition source present that presents a
15 reasonable expectation of coming to fruition in order
16 to arguably meet the imminent danger definition.
17 This would mean, despite that, despite the presence of
18 methane in the explosive range, there is no imminent
19 danger present without an ignition source, with
20 sufficient likelihood to meet the reasonable
21 expectation standard.

22 The presence of methane in the explosive range

1 behind seals does not constitute an imminent danger
2 because of the absence of ignition sources that are
3 likely to ignite methane. There have been a number of
4 ignition sources suggested over the years that might be
5 present in sealed areas. One is rock fall; one is
6 lightning. MSHA itself has addressed both of these in
7 bleeder and gob ventilations systems course text, which
8 was revised in November 1996, where, quote, while
9 people or equipment provide an ignition source for most
10 ignitions and explosions, other natural and sometimes
11 uncontrollable ignition sources, most notably roof
12 falls and lightning, can and do cause explosion. In
13 examining the history of ignitions and explosions from
14 1959 to 1994, only 16, about point seven percent of the
15 total number of ignitions and explosions have been
16 attributed to roof falls. Considering the thousands of
17 roof falls -- considering that thousands of roof falls
18 occur naturally in the United States every year, the
19 ignition of methane caused by roof falls is unlikely.
20 Additionally, during that period, lightning was
21 determined to be the ignition source in two mine
22 explosions and a considered possible suspect in three

1 others, notwithstanding the ignition of methane caused
2 by roof falls and lightning in underground minds may be
3 a concern.

4 The fact that there is a low potential for
5 ignition for rock fall or roof support materials is
6 confirmed by MSHA's own Sago report, where at page 151,
7 they stated, roof faults can ignite explosive methane
8 mixtures, either by generating frictional heat or by
9 releasing piezoelectric energy. During a roof fall,
10 rocks forming the strata, comprising the immediate and
11 the main roof, rub against one another as the roof fall
12 breaks and falls. In rare cases, the resulting
13 friction from rubbing or from impact can cause
14 temperatures above the ignition temperature of methane.

15 The USBM has conducted rubbing friction and
16 impact friction experiments. Under carefully
17 controlled laboratory experiments, the USBM was only
18 able to ignite methane air mixtures in a small
19 percentage of tests, even when the methane ignition
20 concentration was an optimum for ignition, and the Sago
21 report also said the only metal roof supports noted in
22 the fall rubble were fully grouted bolts in the wire

1 mesh noted under the rubble of one fall.

2 These steel roof support materials have not
3 been associated with ignitions in experiments or in
4 documented observations of gob ignitions. It was not
5 possible to determine whether cable bolts noted near
6 the roof falls were in fall rubble. However, previous
7 laboratory testing of the sparks from cable bolt
8 failure do not ignite methane air mixtures. Thus, it
9 is not appropriate to require withdrawal of miners
10 simply because there is an explosive mixture of methane
11 behind the seals. Nor is it appropriate in all cases,
12 as many districts are doing, to require full withdrawal
13 of miners under an action plan. Such approach ignores
14 the fact that even if there is methane in the explosive
15 range and even if there is an ignition source present,
16 the question then arises whether an explosion will
17 breach the seals.

18 The existing 20 psi standard for seals was
19 based on the assumption that explosions in sealed areas
20 are unlikely to exceed that amount. That assumption
21 was not invalid. While Sago exceeded that amount, it
22 again appears to be aberrational because of -- based

1 upon the configuration of the sealed area and the
2 relative recent sealing of the area. It does not,
3 however, equal -- it did not, however, equal 120 psi,
4 as far as I know from the testing, and with the
5 exception of shaft explosions, which are different, it
6 is the most violent explosion that has occurred in this
7 country that we are aware of.

8 It is for this reason we believe the Agency
9 needs to revisit the seal strength requirements. While
10 the Agency has taken a number of varying positions
11 concerning the strength of Mitchell-Barrett seals,
12 ranging from 20 to 50 psi, testing by NIOSH has shown
13 that such seals have a strength of 95 to 100 psi. We
14 understand that the Agency rejects that particular
15 NIOSH testing, but such position is inconsistent with
16 its acceptance of the NIOSH report on seal design. We
17 agree with a recent presentation by an engineer from
18 the West Virginia Office of Miner Health, Safety, and
19 Training, that MSHA should accept those seals as 90 to
20 100 psi seals.

21 Further, we think there should be an upper
22 level standard -- that they should be the upper level

1 standard because to our knowledge, there has not been a
2 breach of properly constructed Mitchell-Barrett seals
3 in this country.

4 It is also important to learn from Sago, and
5 in some instances we have not. We believe there are a
6 number of factors present at Sago that should be
7 instructive as to why the explosion was as powerful as
8 it was. It appears the Agency fails to create a
9 standard where there is a significant risk assessment
10 based on those factors. How large is the methane body?
11 How large is the sealed area, and will an explosion be
12 buffered by water or gob or the size of the area?
13 What is the configuration of the entries in by the
14 seals? How mature is the seal area? What is the depth
15 of cover? What is the type of roof-support materials?

16 All of these sorts of factors must be
17 considered, and the proposed rule fails to do so. We
18 ask that the Agency take steps back and re-evaluate how
19 it is approaching these issues. We believe the
20 proposal fails to consider all the data concerning a
21 sealed area, as well as to recognize the need to
22 evaluate the entire sealed area.

1 Section 75.335(d) requires the installation
2 of two sampling pipes in each new seal. We do not
3 necessarily disagree with the premise of installing two
4 such pipes, although we believe it should not be
5 motivated by any reliance on NIOSH's run-up distance,
6 because we believe that analysis by NIOSH is seriously
7 flawed. We do, however, believe the installation of
8 separately spaced sampling tubes may well demonstrate a
9 fact that we all believe is true. Once a sealed area
10 is mature and generally inert, the area of methane that
11 is not inert is small and confined to the immediate
12 area of the seals, which will fully support a position
13 that seals installed are more than adequate to contain
14 any ignition. It should be recognized, however, unlike
15 the previous rule, that no sampling pipe at a seal, be
16 it 15 feet from the seal or be it one crosscut back,
17 will provide a fully representative sample of a sealed
18 area of any size. This is especially true of areas
19 where a number of longwall gobs have been included
20 within the seal area.

21 We are pleased to see that MSHA seems to
22 partially recognize this fact. The preamble discusses

1 MSHA's opinion that leakage into a sealed area as a
2 result of barometric changes would not, quote,
3 significantly impact the atmosphere in a large portion
4 of the sealed area, but it may affect the atmosphere at
5 a sampling location when the seal is ingassing. But we
6 disagree with the assertion that it is possible for
7 samples at a seal to be, quote, representative of the
8 atmospheric conditions in the larger portion of the
9 sealed area, rather than just the area immediately inby
10 the seal, unquote.

11 The final rule must acknowledge the need to
12 review the entire sealed area. Under the ETS, MSHA
13 has ignored borehole data that can provide a clearer
14 picture of the inertness of the entire sealed area.
15 The rule must address this situation by permitting
16 the use of relevant borehole data as a means of
17 establishing the condition of the entire sealed area
18 and not rely on an action plan based upon one seal set.

19 We also appreciate that the proposed rule
20 included the use of multiple samples to verify the
21 content of the atmosphere immediately behind the seals.
22 We do think that the sample should be spaced longer

1 than an hour apart, perhaps as long as 24 hours, in
2 order to insure that the readings are not aberrational.

3 We also believe that it is critical that the
4 readings be accurate and the same protocol be used by
5 operators as well as MSHA inspectors. We have seen a
6 wide variety of sampling techniques and equipment used
7 by inspectors, and we are very uncomfortable as to
8 whether inspectors are properly instructed on how to
9 take an accurate sample.

10 We, frankly, have not come to rest on whether
11 principal reliance should be placed on hand-held or gas
12 chromatograph samples. We have seen some significant
13 variances between the two, and we would like to see
14 this issue analyzed after a protocol is established.
15 We do not believe that most operators have gas
16 chromatographs readily available to them, and the use
17 of an off-site gas chromatograph can result in a delay
18 of 12 to 24 hours to get the result.

19 Hand-held detectors are the standard in the
20 industry. We are aware that there is potential error
21 in sampling techniques when obtaining a bottle or bag
22 sample and for possible contamination after the sample

1 is collected, as well as a potential for error in the
2 processing of the analysis. Yet there is a potential
3 for sampling error in the use of hand-held detectors
4 and the use of gas chromatographs to provide the
5 potential for greater precision in analysis of more
6 components in the atmosphere. And I will say that
7 based on the samples that I have seen, the errors tend
8 to put the methane back into the explosive range within
9 the sealed area rather than taking it out, so in case
10 anyone was going to suggest that the errors, that's --
11 we do not believe that that error should affect the
12 inert levels.

13 We believe the inert levels in the proposed
14 sealed area are too restrictive. While we recognize
15 the Agency is attempting to take into account sampling
16 error, such approach ignores the fact the atmosphere is
17 behind seals that are designed to contain an explosion.
18 We believe that any atmosphere that is below 5 percent
19 methane or 12 percent oxygen should be considered inert
20 and that any atmosphere above 15 percent methane should
21 be considered inert.

22 For years MSHA has had an informal limit on

1 methane in bleeders of 4.5 percent, which you referred
2 to, Ms. Silvey, and that atmosphere is not contained
3 within a sealed area. In addition, we believe it would
4 be appropriate to use, under some circumstances, the
5 Zabatakis nose curve to determine the true explosive
6 nature of the gob. These calculations are, of course,
7 outlined in informational circular 7901.

8 The margin of error that MSHA proposes simply
9 fails to take into account the nature of the area where
10 the sampling is done; i.e., it is a sealed area.

11 Moreover, we believe that the determination that the
12 atmosphere, where there is a sampling pipe, should not
13 end the inquiry. Once it is determined that a portion
14 of the sealed area is not inert, additional data must
15 be evaluated to determine an overall sense of the
16 atmosphere in the sealed area by looking at other seal
17 data or borehole data, as well as the elevations and
18 locations of water in the sealed area.

19 This brings us to action plans. The proposed
20 rule leaves too much discretion in the hands of
21 district managers without any guidance as to what
22 should be an action plan. District 2, for example, has

1 taken the position that the only acceptable action plan
2 begins with total withdrawal from the mine. This is
3 not acceptable in most circumstances.

4 It fails to consider the fact that the area
5 might not be inert; the size of the area; the potential
6 absorption of ignition forces by water, gob, or the
7 size of the sealed area; and the fact that the seals
8 are designed to contain a certain level of explosion
9 forces.

10 It fails to make use of the baseline
11 established for the sealed area. If that baseline
12 shows that the area is generally inert, then that is a
13 factor that must be considered in evaluating the size
14 of the non-inert area. If the non-inert area is small,
15 the action plan should accept the withdrawal of miners
16 from the immediate area of the seal, with increased
17 levels of monitoring. Only if a mature area has been
18 determined to be primarily non-inert should there be
19 any requirement to inert the whole area. When the
20 non-inert area is just in the vicinity of the seals,
21 it should be the goal to inert that area, not the
22 entire sealed area.

1 Newly sealed areas should be monitored more
2 frequently to determine that they are moving to an
3 inert status. The baseline should be used to establish
4 the nature of the sampling point and an indication of
5 what the internal nature of the gob is. These points
6 should not be expected to never enter the non-inert
7 zone because of changes in the mine or barometric
8 swings. The majority of these baseline numbers should
9 be inert, but it can be expected that there are times
10 when they will not be.

11 The operator must be permitted to take into
12 account the nature of the sealed area in determining
13 an affected area for an action plan. For example, in
14 addition to establishing the amount of a non-inert
15 area, we would expect that mitigating systems be
16 permitted to minimize this affected area. For example,
17 rock-dusting and/or water bags added to the active side
18 of the seal can act to reduce explosion forces, just as
19 they can inby the seals. These types of actions by the
20 operators should be considered when establishing an
21 affected area under an action plan.

22 We believe the proposed rule's requirements

1 for certifications to be excessive. We recognize that
2 it is important to have the seal design certified and
3 to insure that proper construction is accomplished, but
4 we all need to recognize that some of the problems
5 with construction resulted from the failure of the
6 previous rule. When a rule only requires that there be
7 mortar between all the joints, as section
8 75.335(a)(1)(i) previously did, you cannot expect an
9 operator to know that the mortar is to be some precise
10 thickness or some other similar, post-Sago
11 interpretation of the rule.

12 We believe that the requirement for
13 certification of a construction by a professional
14 engineer is wholly inappropriate. In some cases, seals
15 are built over series of months so that a professional
16 engineer would, to certify the construction, would
17 require his presence there throughout the construction.
18 It is a waste of resources when that engineer, assuming
19 that he is an employee of that particular company, can
20 be doing work that has far greater safety benefit in
21 other areas of the mine.

22 In similar fashion, a certified person should

1 not be required to observe the whole construction
2 process. We agree that the person who has supervised
3 the construction can appropriately certify it was built
4 as specified, but there's nothing in the certification
5 process that particularly qualifies such a person to
6 observe construction practices. Further, we don't want
7 to lose sight of the fact that certified people are not
8 necessarily in abundant supply and that they perform
9 critical functions in the active mining areas that,
10 frankly, have a greater safety benefit on a day-to-day
11 basis. The whole emphasis on certification appears to
12 be less an attempt to insure the seals are built
13 properly, but rather an attempt to provide scapegoats
14 if something goes wrong.

15 MSHA specifically solicited comments on the
16 Agency's approach to the strength requirements for
17 seals. We believe that the 120 psi seals provided more
18 than adequate level of protection. We also believe
19 that if Mitchell-Barrett seals can be brought to that
20 level with additional and supplemental work, that they
21 should be accepted.

22 We do not believe that a three-tiered approach

1 is necessary but a more straightforward, two-tiered
2 approach is appropriate. The proposed rule does not
3 specify how much above 120 psi a seal must be to avoid
4 monitoring and other requirements. We think that 120
5 psi is more than acceptable requirement. The problem
6 that we have seen already is that people who want to
7 start installing seals that are in that third tier
8 don't really know what number they're dealing with.

9 We believe any evaluation based on potential
10 detonation ignores the reality, including the types of
11 ignition sources and the fact that there is some
12 question as to whether methane ignition can result in
13 detonation.

14 MSHA has sought comments on the feasibility of
15 including in the final rule a requirement that existing
16 seals be removed and replaced with higher strength
17 seals. Replacing existing seals is impractical and may
18 create severe safety hazards. Seals do not need to be
19 universally remediated. Instead, an assessment of risk
20 should be undertaken to determine whether the existing
21 seals should be remediated to insure effective
22 operation. Any such risk assessment should be based on

1 the location of the seals, the proximity to work areas,
2 the nature of atmospheric concentrations behind the
3 seals and the overall conditions of the seals, and the
4 potential sources of ignition. Such evaluation must
5 take into account a realistic assessment of the
6 strength of the existing seal, not an arbitrary
7 assumption that, because it was approved under a 20 psi
8 standard, that is the actual strength of the seal.

9 We also note that the requirement that all
10 electrical cable be removed from a sealed area, we do
11 not believe that that requirement is necessary or
12 realistic or, frankly, feasible. We are aware of
13 MSHA's theory about a pump cable that was in the sealed
14 area at Sago. Perhaps that is a credible theory in a
15 mine with a very shallow cover such as Sago, but given
16 the quantity of cable left in sealed areas over the
17 years, the theory does not seem to present a realistic
18 possibility of a hazard, generally, in sealed areas.
19 And so that we understand, the Sago, obviously, we were
20 dealing with a thousand-foot plus pump cable.

21 My understanding is there are high-voltage
22 cables that are left in sealed areas that run for

1 thousands of feet. If you -- our thought is that if
2 you would take the approach of removing all cable, it
3 would not be any different in our minds than saying
4 well, roof materials present a potential source of
5 ignitions; you should remove all roof support.

6 Let us conclude by offering a general comment.
7 The previous seal standard, as evaluated in a post-Sago
8 light, is considered inadequate by some, but it
9 certainly was in the level of detail that was included
10 in the standard. Given the fact that almost all the
11 recorded seal failures involve what the Agency
12 considers inadequate construction, this would seem to
13 be the case with the previous standard. When you have
14 inspectors going out to measure mortar thickness years
15 after seal was built, to enforce criteria that were not
16 in the rules, the only conclusion can be -- that can be
17 drawn is that the rule was not specific enough.

18 The proposed rule has a similar failing. We
19 have no doubt it is intended to provide the operator
20 and the district manager and the Agency flexibility.
21 One need only review, as we have done, the disparity
22 and inconsistency in how the districts dealt with the

1 approvals of emergency response plans with respect to
2 breathable air, to know our reason for concern with
3 approvals by district managers. If one wishes to be
4 specific to seals, one needs only to look at the long
5 delay in approving 50 psi seals last year to see why we
6 are concerned with any process that gives the Agency
7 the ability to add requirements that are not specified
8 in the law.

9 We appreciate the opportunity to comment on
10 these proposed rules. Thank you.

11 MS. SILVEY: Thank you, Mr. Moore. You have
12 talked about some of the comments that we have heard
13 earlier, and as I mentioned to earlier commenters, we
14 appreciate your comments.

15 One of the things that you mentioned at the
16 outset or early on in your comments, you talked about
17 we had eliminated -- we had two significant errors, and
18 you mentioned 335(a) in particular, and I would -- I
19 believe you said that it eliminated the -- I'm not
20 quite sure what, so rather than me to repeat you,
21 could I ask you to repeat exactly what you said on that
22 standard?

1 MR. MOORE: Well, I may not be able to repeat
2 exactly what I said.

3 MS. SILVEY: Well, you could, if you had it
4 written there.

5 MR. MOORE: Let me say what I said.

6 MS. SILVEY: Okay, all right.

7 MR. MOORE: The provisions of 75.335(a)(1),
8 that address specifically the Mitchell-Barretts or
9 concrete block seals, were eliminated in the ETS.

10 MS. SILVEY: Uh-huh.

11 MR. MOORE: That raises the question of
12 whether, with respect to pre-May 22nd, 2007 seals,
13 there is a standard to enforce.

14 MS. SILVEY: I see. You reworded what you
15 said.

16 MR. MOORE: Perhaps I may --

17 MS. SILVEY: Even though I didn't write it
18 down, should I ask the court reporter to read it then
19 maybe? No, I won't do that to prolong --

20 MR. MOORE: But if I expressed it more clearly
21 the second time around --

22 MS. SILVEY: You did. You did. I appreciate

1 it very much, your --

2 MR. MOORE: Because that is an issue.

3 MS. SILVEY: Okay.

4 MR. MOORE: And we view it as -- I view it as
5 a mistake because it --

6 MS. SILVEY: Okay, well let me --

7 MR. MOORE: It raises the issue of whether or
8 not -- I know the Agency's position is it doesn't raise
9 the issue, but --

10 MS. SILVEY: No, I wasn't going to say that.
11 What I was going to say is let me just suggest to you
12 that the ETS included -- includes, not included; excuse
13 me -- includes a requirement for construction and
14 repair of seals, and that covers, not only new seals,
15 but existing seals, and in some ways, that requirement
16 is more stringent than in the existing -- than in the
17 previous standard.

18 MR. MOORE: Well, not to dispute that, but the
19 ETS cannot be retroactive.

20 MS. SILVEY: No, but I mean, I'm talking about
21 repair of seals that are in place today, and --

22 MR. MOORE: These were seals that were built

1 in 2003 or --

2 MS. SILVEY: I understand that, and now we are
3 getting --

4 MR. MOORE: -- 2004 or 2005, and --

5 MS. SILVEY: They might have been built in
6 2004 or 2005, but they are in the mine today. So
7 anyway, and I think it clearly says that they are to
8 examine the seals immediately. I can understand.
9 This is getting to be semantical, and we won't prolong
10 everybody's discussion here.

11 MR. MOORE: Yeah, we don't need to --

12 MS. SILVEY: But examine each seal site prior
13 to construction or repair, and it goes on to talking
14 about under construction or repair, and it could be
15 repairing when you talk about maintenance and repair of
16 existing -- previously existing seals. Let me clarify
17 that. But, you know, there may be instances in which
18 we can even better clarify things, and if we so need to
19 better clarify things, we can do that. This is a good
20 opportunity for me to reiterate that while this is an
21 ETS that went into effect immediately under the
22 provisions of the Mine Act, it also -- and you've heard

1 me say this now for the third time -- it also serves as
2 the proposed rule and commences the regular rule-making
3 process. So to that extent, then, that's why we're
4 asking for your comments and your suggestions, that if
5 there are things we need to improve, change, or do
6 whatever in the final rule. This is a proposed rule
7 for that, for the rule-making process, and that's in
8 accordance with the Mine Act, and I know Mr. Moore is
9 nodding his head in the affirmative.

10 Mr. Moore, you brought up, and I'm just -- I'm
11 not going to focus on this very long, because we talked
12 about it earlier, that the ETS does not specify how
13 much above 120 psi. And I think I mentioned that in
14 the opening statement also, that we would like any
15 comments or suggestions people had for -- on the 100 --
16 particularly on the 120, above the 120 psi tier of the
17 three-tier approach, and particularly with respect to
18 specific mining conditions. We listed three conditions
19 in the ETS: pressure piling, the likelihood of a
20 detonation, and homogeneous atmosphere throughout the
21 sealed area. So if you have any suggestions or further
22 alternatives to what we included in the ETS, I would

1 appreciate that.

2 We take into cons -- we take seriously your
3 comments on what's happening in our districts now, and
4 I mean we've heard a number of things, and we will
5 obviously go back and look at what our districts,
6 what's going on in the districts. I mean, I think you
7 all have heard us say this many times before. We try,
8 we aim for consistency, but to a large extent, one of
9 the reasons there is some flexibility is to allow for
10 some flexibility in terms of the many mining
11 conditions.

12 So, you know, so you sort of have sometimes a
13 rub, so to speak, where things rub together, and I'm
14 sure, you know, you all can appreciate that. But, with
15 respect to addressing major issues with respect to
16 sampling, with respect to installation, we try to
17 achieve consistency in that regard.

18 I don't have any more comments to you, Mr.
19 Moore. I'll ask if any of my colleagues have any
20 questions or comments.

21 MR. MOORE: Thank you very much.

22 MS. SILVEY: Thank you, sir. We will next

1 hear from Tim Baker, United Mine Workers of America.

2 **TIM BAKER**

3 MR. BAKER: Thank you. My name is Tim Baker.
4 It's B-A-K-E-R. And I'm here to represent the
5 interests of the United Mine Workers of America.

6 First of all, let me commend the Agency and
7 those individuals who worked on the drafting of this
8 Emergency Temporary Standard. While we do, generally,
9 agree with most of what it contains and won't highlight
10 a lot of that, obviously, because it kind of goes
11 without saying, I will offer some comment on additional
12 protections we believe are necessary and, to the extent
13 possible, discuss some of the other concerns we have
14 which may have been raised here this morning.

15 The Union is pleased to have the opportunity
16 to offer these comments on the Emergency Temporary
17 Standard. The Union has historically expressed great
18 concern about the practice in the industry for sealing
19 abandoned and worked out areas. We expressed this
20 concern in very stark terms in 1992 when the Agency
21 approved alternative seals, and unfortunately, until
22 2006, those concerns went largely unheeded, and nothing

1 was done to address those concerns. But like I said,
2 we are pleased with the efforts of the MSHA staff.

3 The seal strength, we are generally pleased
4 with the Agency's approach for a 50 psi and 120 psi
5 standard. There is some question and some concern,
6 and we do not object to seals that would withstand
7 pressures greater than 120 psi, but there is this
8 concern of how you determine what that would be. We
9 hear a lot about flexibility. We need flexibility for
10 this and that. As I have said many times when giving
11 testimony, I'm not a big fan of giving coal operators
12 any flexibility. I see what they do with flexibility
13 over the years, and it's not a pleasant thing.
14 Flexibility, in our estimation, is the ability to get
15 out of specific requirements.

16 So we would always push for, and in this
17 instance, push for as prescriptive a final rule as we
18 can get so that we know exactly what we're dealing with
19 and then we don't get into the, well, gee, you didn't
20 explain that very well, so I did it this way or I did
21 it that way. We would like this to be very
22 prescriptive.

1 The other thing that we would look at is when
2 we're dealing with seals themselves, we don't believe
3 that new seals should be permitted -- new sealed areas
4 should be permitted to go without being monitored. If
5 you're going to seal an area, after the effective date
6 of the rule, they should be monitored. It's basically
7 as simple as that. Whether it is a 50 psi seal or
8 based on specific conditions in the sealed area, 120
9 psi, there should be monitoring going on. I would
10 suggest to you that most mine operators are monitoring
11 their sealed areas through boreholes and through the
12 seal itself. It's a practice they are very accustomed
13 to. They just don't report a lot of what they find.
14 When we're dealing with large operators that are using
15 the gob gases to sell to gas companies now, we know
16 that they're monitoring so they know what's back there,
17 and that should be part of this mix.

18 We are a little concerned when we seal an
19 area, for instance, in a Pittsburgh seam mine where you
20 have longwalls with vast areas that are sealed, and if
21 I sealed off the mains and had ten seals to seal off
22 the entire 15-square-mile area, and I'm only sampling

1 from two tubes at the very face of the gob, this in
2 reality, tells me nothing. It doesn't tell me what's
3 in the sealed area. The technology exists. They had
4 the availability to monitor through boreholes to let me
5 know what that entire gob is doing. They should be
6 required to do this. They should be required to report
7 that information, and I would suggest that, unlike some
8 of the previous speakers, that when you find an area
9 that is in the explosive range, it absolutely presents
10 an imminent danger to miners.

11 There is no way that you can convince most
12 miners that when you have an explosive mixture of
13 methane behind a sealed area that it doesn't present a
14 hazard, and action needs to be taken. And in our
15 estimation, until that action's corrected, the miners
16 should be withdrawn. Miners should be withdrawn from
17 the mine until that condition is corrected, whether
18 that is pumping nitrogen, CO, however you're going to
19 inert that area, however you're going to alleviate the
20 problem.

21 So those are the issues that we look at when
22 we deal with monitoring the seals, simply because we

1 think that none should go without monitoring.

2 Construction of seals, I will differ with
3 everybody else that's been up here. You need to have
4 a certified engineer present when the seals are being
5 constructed. And I'm not saying to watch them lay
6 every block, but there's got to be a representative
7 time when that individual is there, a responsible
8 person, who yes, I can point to and say, you said it
9 was done correctly. Somebody has got to be held
10 responsible. I think that becomes very clear from the
11 Sago situation. It also brings to mind what exists out
12 there in other mines. If nobody -- if conditions at
13 Sago are even semi-typical of the industry, how many
14 seals do I have constructed that are inadequate and
15 nobody checked them?

16 There was nobody there to examine them being
17 constructed. There was no specific or necessary
18 training given to the miners who were installing. It
19 was just, you know, stack the blocks and put some
20 mortar on them. So I think that we must have someone
21 there, at least for a representative time that they're
22 building them. They need to certify that they were

1 done correctly. They need to sign the book. They need
2 to say that I was there and I witnessed. That is
3 extremely important, because other than that, we're
4 just creating a paper chase. We're not really changing
5 the culture. We're just saying, well, you know, we got
6 it on paper, and it looks good, so somebody needs to be
7 there.

8 Economic feasibility, and I'll just -- some of
9 the questions you asked, specifically, I won't address
10 them all. Economic and technical feasibility of
11 monitoring and inerting seals, I think, is pretty much
12 -- it goes to my opening statement that, you know, we
13 have the technology. We understand how we need to do
14 these things, and the reality is not doing them does
15 a great disservice to the miners, and we saw that at
16 Sago. So when we talk about economics, I look at it as
17 how expensive is it to do this, based on 17 miners last
18 year? I would say the cost is pretty minimal, and I
19 get frustrated whenever people talk to me about the
20 extreme costs that these things are going to play out.
21 There's a whole lot of families that would argue that
22 point, also.

1 As far as replacing existing seals, the Union
2 sees that as a definite hazard, an extreme danger. You
3 can't -- I mean, if you have seals that are currently
4 in place and it is determined that they are not
5 functioning in at 20 psi, you would say, you know,
6 they're not structurally sound. We are not certain
7 that it is the least bit feasible to remove those and
8 replace those. It may be necessary to build a seal in
9 front of those, take some remedial action to correct
10 the situation, but removing seals just like we've
11 mentioned before, if a sampling tube is damaged, we
12 wouldn't see why you would want to drill a hole in a
13 seal and put in a new sampling tube. Messing with an
14 existing seal is just too dangerous, as we see it.
15 Replacing those with a new seal in front may be the
16 only practical relief for that particular situation.

17 I would also agree -- I know this may be
18 shocking, but I almost hate to say it, Hank, but I'll
19 have to agree with you. There's got to be some
20 understanding that existing conditions in mines where
21 you have seals within 150 feet of a track or a belt,
22 those things, at this point, have got to be taken into

1 consideration. Now, having said that, the down side
2 for industry may be that then that seal now must go
3 beyond 120 psi because of the proximity to the source
4 of a hazard. But we do have to consider that whenever
5 we make the final rule.

6 We absolutely do support the idea of two
7 sampling tubes in a bag, but like I said before, we
8 need more sampling than that. In general, we are a
9 little concerned that nothing -- I guess the best way
10 to say this is no seal material's been taken off the
11 table. We have, historically, opposed the use of
12 certain seal material, whether it's Omega block or wood
13 and understand the conditions where some may argue that
14 those are necessary, but there are some seal materials
15 that the Union does not believe are protective enough.
16 They just do not meet a basic standard that we can be
17 comfortable with to protect miners. Omega blocks are
18 an example that we need to look at, and you know, we
19 have called for a ban on the use of Omega blocks for
20 any kind of ventilation control and would pursue that
21 in this rule that if you're going to be prescriptive
22 and you're going to define what you can and can't do,

1 that there should be certain materials that are
2 acceptable and not others. And we would advise the
3 Agency to consider that.

4 As far as the frequency of sampling, we are
5 in favor of a weekly sampling, once we've reached a
6 baseline and would obviously have the particular sealed
7 area sampled weekly, recorded in the books. Everybody
8 knows what's going on, any hazards recorded. I think
9 that goes pretty much without saying.

10 Training for seal construction, we think needs
11 to be much more detailed than what it has been, and we
12 are pleased with a lot of what's in the ETS. We would,
13 however, request a couple of things, and that would be
14 that, occasionally, an inspector sit in on training
15 whenever they know they're going to do seal training,
16 so that the inspector can be sure -- the Agency can be
17 sure that that training is applicable to what's going
18 to happen underground. I think far too often, we say
19 you've got to do training and it's on the books, and
20 then two years from now, the training occurs, and we
21 don't even know what's happening in training.

22 The other thing we would look at is the

1 individual who is giving training should be required to
2 meet a certain standard and then not for a lifetime be
3 certified. There's got to be some evaluation of the
4 trainer, and that could happen when the inspector's
5 sitting there listening to the training. I mean,
6 obviously, if things aren't going correctly or if he
7 hears things that aren't correct, then he should raise
8 those issues and it should be addressed.

9 We would also like to say that along with the
10 certified engineer being available and onsite to watch
11 the construction that, quite frankly, an inspector
12 should watch enough of the seal construction for each
13 seal to know that they're being done correctly, also.
14 I don't think that's overtaxing. I think, you know,
15 when they're making their walk, they can watch those
16 individuals building a seal.

17 That is pretty much the position that the
18 Union has. Like I said, we are very pleased that the
19 Agency has issued this ETS. We hope that our comments
20 will assist you in making it perhaps a little more
21 protective.

22 The other thing I would like to say before I

1 close is there has been some comments here about high-
2 risk zones and safety zones, and I would suggest that
3 those comments are ill advised, and I would request
4 that MSHA not consider safety zones or high-risk areas.
5 If we have a large sealed area and we have even part of
6 it in the explosive range, our opinion is that the
7 entire mine's at risk. There's no place in that mine
8 that you can clearly say, if these individuals don't
9 go within so many feet or if they just stay in this
10 section, they'll be okay. That is an unacceptable
11 determination, and I don't know who would make that
12 determination.

13 I certainly wouldn't want to say to any of
14 you, well, we have a sealed area over there. It's in
15 the explosive range, but if you stay over there, you'll
16 be okay. I don't think that's advisable. I don't
17 think we want to go down that path. That's a slippery
18 slope.

19 But that's pretty much what our comments are.
20 We will provide detailed written comments to the extent
21 that that will be helpful, and if you have any
22 questions, I'll be happy to answer them.

1 MS. SILVEY: So you will provide detailed
2 written --

3 MR. BAKER: Absolutely.

4 MS. SILVEY: Okay. I think that -- not think.
5 That will be helpful if you do that before August 17th.

6 MR. BAKER: Yes.

7 MS. SILVEY: I don't have anything. Do you
8 have anything?

9 MR. SHERER: I've got two minor questions,
10 Mr. Baker. You had mentioned that you think all new
11 sealed areas need to be monitored and maintained inert.
12 I assume you included the existing areas as already
13 being monitored and maintained inert?

14 MR. BAKER: The existing sealed areas?

15 MR. SHERER: Yes.

16 MR. BAKER: Should be monitored and maintained
17 inert, yes.

18 MR. SHERER: Okay. I just wanted to clarify
19 that.

20 MR. BAKER: Yes.

21 MR. SHERER: Thank you. The second one is you
22 mentioned that MSHA inspectors should be present for

1 each seal being built. Is that what you suggest or
2 maybe a representative number of seals out of each set
3 of seals?

4 MR. BAKER: What I would suggest, and I think,
5 Erik, you're probably right, a representative number of
6 seals for a period of time long enough so that they can
7 say, I did witness them building the seal, and they
8 were doing this correctly. And I'm not suggesting that
9 they're going to build a bank of 90 seals and I've got
10 to have an inspector sitting there for 90 -- to watch
11 90 seals being built, but at least enough to know that
12 it's being done correctly. And then if you're building
13 a lot of seals, as has been said earlier, that, you
14 know, they built 90 seals, you know, two weeks from now
15 or a month from now, you'll still be building them, and
16 he can go in again and look.

17 MS. SILVEY: Well, just to clarify, too, for
18 everybody here, you supported the professional engineer
19 being at the construction phase installation.

20 MR. BAKER: Yes.

21 MS. SILVEY: But I think your comment was that
22 the engineer didn't have to be there for the whole

1 time, for a representative to get a representative view
2 of what was going on?

3 MR. BAKER: Exactly.

4 MS. SILVEY: Okay, same thing then.

5 MR. BAKER: And he's got to be there to
6 witness it being done and make sure that he's
7 comfortable, because as was stated before, you can call
8 it whatever you want. You can call it a responsible
9 individual signing off, or you can call it the
10 scapegoat. I just want to know that a professional who
11 is responsible for it was there and said it was done
12 right. And that gives me, at least, a comfort level.

13 MS. SILVEY: I don't have anything. Do you
14 have any questions? No more -- we don't have any more
15 comments. Thank you.

16 MR. BAKER: Okay, thank you.

17 MS. SILVEY: Our final commenter -- I
18 shouldn't say final, because somebody else might want
19 to say something -- is Bill Worthington. Is Bill
20 Worthington here? Yeah, on behalf of himself.

21 **BILL WORTHINGTON**

22 MR. WORTHINGTON: Good morning. Is it still

1 morning?

2 MS. SILVEY: Good morning. It's still -- no.

3 MR. SHERER: You just missed it.

4 MR. WORTHINGTON: I'm Bill Worthington. I
5 come to you as a consultant. I'm an analytical
6 chemist. I have more than 30 years' experience in gas
7 analysis, and I'd like to say that the monitoring and
8 the standard does make sense, and I'd like to emphasize
9 that it only makes sense if it's done correctly.

10 There's a large misunderstanding in this area
11 between detection of gases and analysis of gases.
12 Several of the speakers before me have mentioned
13 portable units versus gas chromatographs. This
14 difference is being brought to the forefront when they
15 say that.

16 The reason you're doing the analysis is
17 because you don't know what's there. The detectors
18 normally detect the presence of gas. Most of these
19 depend on the background being something like air. If
20 the background is not air, they don't give good
21 results, and in this case, when you need the device to
22 work for you the most is when it is least effective,

1 and I would say you need to proceed with great caution
2 about the protocols and the methodology of analysis, to
3 make sure results are correct.

4 We do know that gases stratify; therefore, the
5 location of the sample points is very important. We've
6 also had discussions about representativeness of the
7 samples. This is also of great importance. I don't
8 know that I have solutions for these, only that they
9 must be thought about. But this brings up the question
10 in my mind, is sampling once a week sufficient? Is
11 that enough? And I don't know where this -- you know,
12 obviously, we are familiar with weeks, and somebody
13 said, oh, once a week is good enough, and I'd like to
14 see some basis for that.

15 The baseline, have enough baselines been done
16 to know whether or not these are variable or not? Can
17 you go back and do a baseline in three months and
18 determine a different baseline? So I question, also,
19 the basis then of a weekly sample based on you had a
20 stable baseline. Without enough study, this is not
21 justified.

22 One of the companies I'm affiliated with have

1 done automatic monitoring systems in Australia and have
2 many of these installed. The results they have gotten
3 in Australia have been superb, and no accidents have
4 occurred in any mines since they've been using this
5 technology.

6 The gas detection versus analysis, I think if
7 you study the use of analyzers in mines, you can
8 conclude that gas detectors are normally used to
9 protect equipment, and gas analyzers are used to
10 protect lives. A gas detector has the advantage that
11 it gives a fast response; therefore, if you own the
12 mining equipment and you detect a high methane reading,
13 it's very immediately you can take action to protect
14 the equipment. The same thing is true for conveyors,
15 frictional fires, and so forth.

16 The analyzers, on the other hand, do give
17 accurate analyses. The large benefit of the system is
18 saving the data and trending it to recognize trends
19 over time to predict troublesome times ahead or
20 problems. And that's really all I had to say, just a
21 word on the side of caution.

22 MS. SILVEY: Well, we appreciate that, but I

1 tell you one thing, you said you have some comments,
2 and we appreciate your comments, but -- and you said I
3 don't know if I have any solutions, but if you have any
4 additional specifics in response to some of these
5 specific requirements, particularly as related to
6 sampling. You mentioned, you know, detection or
7 analysis, trends and --

8 MR. WORTHINGTON: The two sample pipes could
9 in fact be a very good idea, because if you have
10 different readings, it does show you do have
11 stratification or perhaps if you have a higher oxygen
12 concentration near the seal, than you do further in,
13 obviously, one would suspect the seal has leaked air
14 into this --

15 MS. SILVEY: But it --

16 MR. WORTHINGTON: But this is strictly
17 supposition, you know.

18 MS. SILVEY: I understand, and I was going to
19 say this is -- I'm only saying that if you would like
20 to and if you have any more specifics beyond your
21 caution, your word of caution to us, if you would --

22 MR. WORTHINGTON: I'll try to write something

1 to submit for the record.

2 MS. SILVEY: Okay. Anybody have -- thank you.

3 MR. WORTHINGTON: Thank you.

4 MS. SILVEY: At this point, we have -- we've
5 heard from all of our speakers who signed up, either
6 registered or signed up to speak. Is there anybody
7 else here now who wishes to speak?

8 *(No responses.)*

9 MS. SILVEY: Okay. If there is nobody else
10 here now who wishes to speak, what I'm going to do at
11 this point is thank everybody very much for you
12 attendance here. First of all, we appreciate the ones
13 who spoke and took the time and gave us a lot of good
14 information that we are going to go back and review.
15 Those of you who promised that you're going to get
16 information to us, additional specific information
17 before the comment period closes on August 17th, and
18 then we also appreciate those of you who are here and
19 maybe you didn't speak but you have an interest in
20 these rule-making proceedings and in fact, you may
21 speak at one of the three remaining hearings. So we
22 look forward to your continued -- to those of you who

1 will speak at one of the three remaining hearings. We
2 look forward to your participation in the remainder of
3 the process.

4 I am going to tentatively bring this hearing
5 to a conclusion. I say tentatively because the Federal
6 Register notice included the fact that we would be here
7 from nine until five, so we will be back a little bit
8 after one o'clock, just in case somebody couldn't get
9 here until one. But if nobody comes for the one
10 o'clock period, then we will just assume that this
11 hearing and these proceedings are concluded. Thank you
12 again.

13 *(Luncheon recess at 12:15 p.m.)*

14 *(Whereupon the meeting adjourned at 1:30 p.m.,*
15 *it having been determined that no additional speakers*
16 *were present.)*

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STATE OF MARYLAND, SS:
COUNTY OF GARRETT, to-wit:

I, Christina D. Pratt, a Notary Public of
the State of Maryland, do hereby certify that I
recorded the public hearing of the Mine Safety and
Health Administration on July 10, 2007, and that this
transcript is a true record of those proceedings.

As witness my hand and Notarial Seal this
13th day of July, 2007.

Christina D. Pratt

My commission expires:
November 1, 2008