

1 OPENING STATEMENT
2 BIRMINGHAM, ALABAMA
3 JULY 19, 2007, PUBLIC HEARING
4 EMERGENCY TEMPORARY STANDARD-SEALING
5 OF ABANDONED AREAS

6 MS. SILVEY: Good morning.

7 AUDIENCE: Good morning.

8 MS. SILVEY: Before we start
9 the record.

10 (Whereupon, an off the
11 record discussion
12 occurred.)

13 MS. SILVEY: Again, good
14 morning. My name is Patricia W.
15 Silvey. I am the director of the
16 Department of Labor, Mine Safety and
17 Health Administration, Office of
18 Standards, Regulations, and Variances.

19 I will be the moderator of
20 this public hearing on MSHA'S
21 emergency temporary standard, or ETS,
22 for sealing abandoned areas in
23 underground coal mines.

1 On behalf of Richard E.
2 Stickler, the Assistant Secretary of
3 Labor for Mine Safety and Health, I

4 want to welcome all of you here today.
5 The members of the panel are
6 to my left John Urosek of MSHA's
7 Pittsburgh Safety and Health
8 Technology Center; Deborah Green who
9 is our attorney on this project with
10 the Office of Solicitor, the
11 Department of Labor.

12 And William Baughman who is
13 the Regulatory Specialist in my
14 office. To my right, Eric Sherer.
15 Eric is from the office of Coal Mine
16 of Health and Safety. And to his
17 right, Robert Stone who is the Chief
18 Economist in my office.

19 Before we start this hearing
20 this morning, I would like to ask if
21 you would join with me in a moment of
22 silence in memory of the miners who
23 lost their lives in the Sago, the

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1 Aracoma, and the Darby Mine explosions
2 in 2006. And all of the miners who
3 lost their lives in 2006 as well as
4 the miners who have died in mine
5 accidents so far this year.

6 So, right now, if you would
7 join me in a moment of silence.
8 (Everybody in silence.) Thank you.
9 This is the fourth and last hearing on
10 the Emergency Temporary Standard. As

11 many of you know, the first hearing
12 was held in Morgantown, West Virginia
13 on July 10th. The second in
14 Lexington, Kentucky on July 12th. The
15 third hearing was in Denver on July
16 17th.

17 In the back of the room, we
18 have copies of the Emergency Temporary
19 Standard and the Federal Register
20 notice extending the comment period to
21 August 17. The purpose of these
22 hearings is to receive information
23 from the public that will help us

4

1 evaluate the requirements in the
2 emergency temporary standard and
3 produce a final rule that protects
4 miners from hazards associated with
5 sealed abandoned areas.

6 We will use data and
7 information gained from these hearings
8 to help us craft a rule that responds
9 to the needs and concerns of the
10 mining public, so that the provisions
11 of the ETS can be implemented in the
12 safest and most effective and
13 appropriate manner.

14 We published the emergency
15 temporary standard in response to the
16 grave danger that miners face when

17 underground seals separating abandoned
18 areas from active workings fail. Seal
19 failures at the Sago and Darby No. 1
20 Mine in 2006 raised awareness of the
21 problems with construction and design
22 of alternative seals. MSHA
23 investigated these and other failures

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1 of alternative seals and conducted
2 in-mine evaluations of these seals.
3 MSHA also reviewed the history of
4 seals in this country as well as other
5 countries.

6 On February 8, 2007, NIOSH
7 issued a draft report titled
8 "Explosion Pressure Design Criteria
9 for New Seals in U.S. Coal Mines."
10 The report makes recommendations for
11 seal design criteria, which would
12 reduce the risk of seal failure due to
13 explosions in abandoned areas of
14 underground coal mines.

15 Based on MSHA's accident
16 investigation reports, the draft NIOSH
17 report, MSHA's in-mine seal
18 evaluations, and the review of
19 technical literature, MSHA has
20 tentatively determined that new
21 standards are necessary to immediately
22 protect miners from hazards associated
23 with sealed areas. The emergency

1 temporary standard addresses seal:
2 strength; design and installation;
3 construction and repair; sampling and
4 monitoring and training.

5 This ETS was issued in
6 accordance with section 101(b) of the
7 Federal Mine Safety and Health Act of
8 1977 (Mine Act) and Section 10 of the
9 Mine Improvement and New Emergency
10 Response (MINER) Act of 2006. Under
11 section 101(b), the ETS is effective
12 until superseded by a mandatory
13 standard. A mandatory standard must
14 be published no later than nine months
15 after publication of the ETS. The ETS
16 also serves as the proposed rule and
17 commences the regular rulemaking
18 process.

19 As stated earlier, we will
20 use the information provided by you to
21 help us decide how best to craft the
22 final rule. The preamble to the rule
23 discusses the provisions of the ETS

1 and includes a number of specific
2 requests for comment and information.
3 As you address the provisions of the

4 ETS or any specific requests for
5 information, either in your comments
6 to us today or in written comments
7 sent to us in Arlington, please, be as
8 specific as possible with respect to
9 the impact on mine safety and health,
10 mining conditions, and the feasibility
11 of implementation. At this point, I
12 want to reiterate the specific
13 requests for comment and information
14 that we included in the preamble to
15 the ETS.

16 In the ETS, MSHA considered
17 a performance-based approach to the
18 strength requirement for seals.
19 However, MSHA includes specific
20 pounds-per-square-inch numbers when
21 referring to the strength of seals as
22 the agency believes this represents a
23 more appropriate approach. MSHA is

8

1 interested in receiving comments on
2 the Agency's approach to the strength
3 requirement for seals.

4 MSHA is also interested in
5 receiving comments on the
6 appropriateness of the three-tiered
7 approach to seal strength in the ETS
8 and the strategy in the ETS for
9 addressing seal strength greater than
10 120 psi. As you know, under the ETS,

11 new seals must be constructed and
12 maintained to withstand: A 50 psi
13 overpressure when the atmosphere in
14 the sealed area is monitored and is
15 maintained inert.

16 A 120 psi overpressure if
17 the atmosphere is not monitored and is
18 not maintained inert. Or an
19 overpressure greater than 120 if the
20 atmosphere is not monitored and is not
21 maintained inert and certain other
22 specified conditions are met.

23 And those conditions are

9

1 pressure pilot or the likelihood of
2 detonation and homogenous atmosphere
3 throughout the sealed area.

4 MSHA requests comments on
5 the appropriateness of the Agency's
6 strategy for addressing Seal strength
7 greater than 120 psi. If commenters
8 believe a different regulatory
9 approach should be developed for the
10 final rule, the Agency would like
11 commenters to provide the detailed for
12 such a strategy; the rationale for
13 such a strategy; and the feasibility
14 of using such a strategy.

15 MSHA seeks the views of the
16 mining community regarding whether

17 there are effective alternatives to
18 the requirements in the ETS with
19 respect to providing the most
20 appropriate and protective action for
21 miners exposed to hazards of existing
22 sealed areas.

23 Most alternative seals

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

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

20 MSHA also considered whether
21 to require mine operators to reinforce
22 existing seals. The Agency is
23 concerned with the feasibility of this

1 option and whether such a requirement
2 could expose miners to greater
3 hazards. MSHA, however, will continue
4 to explore technological advances that
5 address feasible and safe methods to
6 reinforce existing seals in
7 underground coal mines.

8 Commenters are encouraged to
9 submit information and supporting
10 data, regarding new technological
11 advances to reinforce seal strength.

12 MSHA believes that the
13 sampling strategy in the ETS will
14 yield results that reflect a
15 reasonable representation of the
16 atmosphere in a sealed area. MSHA
17 requests comments addressing the
18 sampling approach in the ETS. The
19 Agency is particularly interested in
20 comments concerning sampling, the
21 sampling frequency, including sampling
22 only when a seal is outgassing. The
23 Agency requests comments on whether

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1 another approach is more appropriate
2 such as when the seal is ingassing.
3 MSHA also requests comments,

4 information, and experiences
5 concerning sampling sealed areas.

6 In the ETS, mine operators
7 must develop a sampling protocol to be
8 included in the ventilation plan and
9 submitted to the District Manager.

10 The ETS requires the mine operator to
11 implement the action plan specified in
12 the sampling protocol or withdraw all
13 persons from the affected area when
14 specified concentrations are
15 encountered.

16 Historically, when methane
17 levels reach 4.5 percent in active
18 areas, miners were withdrawn from the
19 areas that were dangerous due to high
20 concentrations of methane. MSHA
21 requests comments on this approach and
22 whether it provides adequate
23 protection for miners.

13

1 MSHA is soliciting comments
2 concerning issues related to
3 establishing a sampling baseline. The
4 ETS requires that the mine operator
5 specify procedures in the protocol to
6 establish a baseline analysis of
7 oxygen and methane concentration at
8 each sampling point over a 14-day
9 sampling period. The baseline must be
10 established after the atmosphere in

11 the sealed area is inert or the trend
12 reaches equilibrium. MSHA is
13 particularly interested in comments
14 concerning the establishment of a
15 baseline. The Agency requests
16 information, experiences with sampling
17 of sealed areas, including data,
18 analytical information, and the
19 establishment of equilibrium, and
20 trends.

21 The Agency requests comments
22 on the appropriateness of the
23 requirement regarding the use of open

14

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

9 The ETS requires each newly
10 constructed seal to have at least two
11 sampling pipes. One pipe must extend
12 into the sealed area approximately 15
13 feet. The others must extend into the
14 middle of the intersection with the
15 first connecting crosscut. The ETS
16 affords flexibility to mine operators

17 for the placement of the sampling end
18 to allow more accurate sampling
19 strategies to better protect miners;
20 therefore, the ETS requires the
21 location of sampling points to be
22 specified in the protocol provided.
23 The Agency requests comments regarding

15

1 the appropriate number and location of
2 sampling pipes for a final rule.

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

12 MSHA requests comments on
13 the appropriateness of the ventilation
14 plan contents and whether additional
15 information should be included. When
16 submitting information supporting your
17 positions, please, include data
18 related to projected cost and
19 technological feasibility.

20 As you know, the ETS
21 requires removal of insulated cables
22 from the area to be sealed and removal
23 of metallic objects through or across

1 seals. The Agency believes that
2 removal of insulated cables and
3 metallic objects through or across
4 seals is feasible and will not involve
5 significant technical or practical
6 problems. But the Agency solicits
7 comments on this provision.

8 MSHA is also requesting
9 comments on the scope and possible
10 alternatives concerning site
11 preparation, examinations of the
12 sealed area, training, and
13 notification to the Agency related to
14 the construction and repair of seals.

15 MSHA has prepared a
16 Regulatory Economic Analysis for the
17 ETS. The Regulatory Economic Analysis
18 contains estimated supporting cost
19 data. MSHA requests comments on all
20 the estimates of costs and benefits
21 presented in the ETS and the
22 Regulatory Economic Analysis.

23 To date, the Agency has

1 received one comment on the ETS, and I
2 believe it's still one comment. You
3 can view the comment on the Agency's

4 website at www.msha.gov under the
5 section entitled "rules and
6 regulations." The Agency has also
7 answered a number of compliance
8 questions from the public, covering a
9 wide range of issues on the ETS.
10 These questions and answers are posted
11 on MSHA's Seals Single Source Page.

12 As many of you know, the
13 format for this public hearing will be
14 as follows: Formal rules of evidence
15 will not apply, and the hearing will
16 be conducted in an informal manner.
17 Presentations may be limited to 20
18 minutes at the discretion of the
19 moderator. The panel may ask
20 questions of the witnesses, and the
21 witnesses may ask questions of the
22 panel.

23 Those of you who notified

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1 MSHA in advance, I don't think we'll
2 have any problems with having time
3 today though. If you wish to present
4 written statements or information,
5 please, clearly identify your
6 material. You may also submit
7 comments following this hearing.

8 And as stated earlier,
9 comments must be submitted to MSHA by
10 August 17th, which is the close of the

11 comment period. And comments may be
12 submitted by any method identified in
13 the ETS.

14 MSHA will post transcripts
15 from the public hearings on the
16 Agency's website. Each transcript
17 should be posted approximately one
18 week after completion of the hearing.

19 We will now begin today's
20 hearing with persons who have
21 requested to speak. Please, begin by
22 clearly stating your name and
23 organization to make certain we have

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1 an accurate record. Also, if you
2 would spell your name for the
3 reporter. And now, our first speaker
4 is Tom McNider with Jim Walter
5 Resources. And I think he's here. He
6 is.

7 MR. MCNIDER: Well, first of
8 all, I heard John wasn't going to be
9 here. I hear I'm it; is that true?

10 MS. SILVEY: I don't know,
11 we'll see. We have to see what
12 happens after you testify. People
13 might be moved to say something.

14 MR. MCNIDER: They probably
15 will. How are you-all?

16 MS. SILVEY: How are you

17 doing?

18 MR. MCNIDER: First of all I
19 -- and I guess this is on?

20 MS. SILVEY: Yeah. Make
21 sure you talk into the mic.

22 MR. MCNIDER: I apologize
23 for cutting it right here. I don't

20

1 know whether I held the panel up or
2 not. But, anyway, you know, I'm here
3 to speak. I'm Tom McNider,
4 M-C-N-I-D-E-R, Jim Walter Resources.
5 I'm here today to comment concerning
6 the ETS, sealing of abandoned areas on
7 the temporary standard that was issued
8 May 22nd, 2007.

9 And first, I'd like to start
10 out by saying that, we understand the
11 reason MSHA feels the need to issue
12 the final rule or rule for the use to
13 isolate abandoned areas. But that, we
14 are concerned that through pressure,
15 they've issued a rule in haste without
16 thoroughly considering all the
17 parameters.

18 Entry requested suggestions
19 from the industry concerning such
20 things as monitoring of existing seals
21 but when offered, ignored them in the
22 final rule.

23 I was part of the NMA and

1 Dixie Wade Committees that met with
2 MSHA on various times. I don't know
3 have the dates. But they were at
4 least one meeting in Washington and
5 then, there was other correspondence
6 that I think was giving to MSHA
7 concerning this rule.

8 MSHA requested suggestions
9 from industry concerning such things
10 as monitoring of existing seals, but
11 when offered, ignored them in the
12 final rule. Industry met with MSHA in
13 Arlington to talk about the need for
14 proper sampling protocol and the need
15 in industry for instruments that can
16 accurately measure gases from sealed
17 areas. But here again, MSHA has
18 ignored these requests.

19 And I believe even today,
20 there's no official -- or I won't say
21 official -- but guidelines as to how
22 to collect samples from sealed areas,
23 instruments to properly measure sealed

1 areas. And a general training that
2 industry could use that would assist
3 industry in how to adequately evaluate

4 sealed areas.

5 And that is a major, even
6 for MSHA, that has been a major
7 concern. There have been numerous
8 sampling areas in the field that has
9 inadvertently caused problems of mines
10 to be shut down when this was not a
11 warranty.

12 We're amazed that MSHA is
13 trying to evaluate the explosive
14 nature of sealed abandoned areas, was
15 not even recognized all the gases that
16 must be considered to determine these
17 close in nature of a job.

18 The final rule requires the
19 operator to measure oxygen and
20 methane, but does not require
21 measuring CO₂, the gas derived from
22 low temperature oxidation. And I'm
23 sure many of the ones on the panel, I

23

1 know John is familiar with this, Eric
2 probably.

3 As you get low levels of
4 oxidation, you derive blackdamp, which
5 is a depletion of oxygen and increase
6 in CO₂. CO₂ is an inert gas, and even
7 though methane and oxygen might be in
8 the action range of 3 to 20 percent
9 methane and above 10 percent oxygen or
10 even appear to be explosive or may

11 even appear to be explosive with
12 methane above 12 percent or oxygen
13 above 12 percent and methane in the 5
14 to 15 percent range, it still may not
15 be because of the inert nature of CO₂
16 that may be present in the sample.

17 Industry discussed with MSHA
18 in Arlington the use of a
19 chromatograph to more accurately
20 determine the constituent gases of
21 sealed area when there was a question
22 and that the true explosive nature of
23 the sealed area needed to be

24

1 determined.

2 Industry discussed the
3 benefits of having more accurate
4 analysis and how these results could
5 be evaluated using the calculations to
6 plot the Zabetakis nose-curve. A
7 method that has been used throughout
8 the industry for years to determine
9 whether atmospheres are explosive or
10 not when fighting fires.

11 We were told that this would
12 be an accepted method by Mr. Stickler.
13 But when it became necessary to use it
14 in the field, MSHA attached such a
15 large measure of safety to it, that it
16 became impractical to use.

17 When methane is the only
18 explosive gas, the R value of the
19 Zabetakis nose-curve is one. MSHA
20 arbitrarily assigned an R value of .6,
21 which would consider in the area under
22 the R curve of one to the R curve of
23 .6 is 130 percent safety factor.

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1 According to page 3 of
2 IC7901, there's already a small safety
3 factor built into the calculations
4 when used at ordinary temperatures.

5 Jim Walter's understanding
6 when the temporary standard was
7 released and my understanding was,
8 that the reason that MSHA or one of
9 the ways that MSHA was looking at it
10 with a 3 to 20 percent indicator, if
11 oxygen was greater than 10 was an
12 action level to do other things.

13 Jim Walter has on-site
14 chromatograph and anyone that's ever
15 dealt with fire situation or when
16 you're trying to -- even MSHA collects
17 bottle samples routinely to further
18 evaluate and get a closer more
19 accurate call with a chromatograph.

20 So, therefore, it was
21 logical, and I still believe it was
22 logical that to follow-up hand
23 readings, which handheld readings are

1 not as accurate as potentially a
2 chromatograph as far as a
3 chromatograph would be, then it
4 certainly made good scientific
5 technical reasoning to follow-up using
6 a chromatograph as an evaluation to
7 actually what is inside the sealed
8 area or inside that analysis from that
9 particular seal when there became a
10 question mark.

11 I called Kevin Strickland to
12 find out if this was a National
13 guideline to use an R value of .6 and
14 that did the sample result when
15 plotted must be outside of this R
16 value. He told me that this was
17 correct and that that would be their
18 policy.

19 Matter of fact, I was told
20 that that was in the question and
21 answers that he thought it was. I
22 believe he told me he thought it was
23 in the June 11th question and answers.

1 And when I checked, I could not find
2 any reference to that. But I was told
3 by phone conversation that that would

4 be the MSHA's policy. And that that
5 was a National way that they would
6 look at it from not just a District
7 11th point of view but from a National
8 point of view.

9 He told me that this was
10 correct as I said before, and that
11 that would be their policy. I asked
12 him where this originated from, and he
13 told me from John. I called John --
14 or John Urosek -- I called John and
15 asked him was there a mathematical way
16 that this was derived to possibly
17 relate it to the ETS and how was this
18 value arrived at.

19 He told me that this was an
20 arbitrary safety factor that he had
21 historically used in fighting fires.
22 And I related to John that to me
23 there's quite a bit of difference in a

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1 fire situation and one where the
2 atmosphere is sealed and there is no
3 fire.

4 Industry was badly misled
5 when we were told in Washington that
6 we could use the Zabetakis nose-curve
7 by Mr. Stickler. And John and Kevin
8 were in the room, and there was no
9 discussion of any safety factors. It
10 never came up in the meeting. If it

11 was even considered, it would seem
12 like that would be the logical place
13 to discuss merits of one.

14 Rather than using proper
15 science and encouraging industry to
16 use techniques that has been a
17 standard since this development in
18 1959, MSHA has done nothing to but
19 discourage its use.

20 If MSHA is concerned about
21 the use of the chromatograph because
22 it is not available to all operators,
23 I mean, we can understand that to some

29

1 degree. But MSHA still could make a
2 proper evaluation of atmospheres and
3 sealed areas by requiring methane,
4 oxygen, and CO2 to be measured with a
5 handheld unit.

6 The remainder of the gas
7 will be nitrogen because these are the
8 primary component gases in the sealed
9 areas. Knowing this, effective inert,
10 which is the X axis of the Zabetakis
11 nose-curve can be calculated using the
12 formula on page 5 of IC7901. You will
13 have to do some mathematics, but you
14 can get down to where you can use a
15 handheld to give you an indicator of
16 are you truly explosive or not

17 explosive.

18 The way the ETS is written
19 is only to measure methane and oxygen.
20 The miners are being withdrawn from
21 mine under false pretense when the
22 atmosphere is not even explosive. Jim
23 Walter's No. 4 Mine was threatened to

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1 be withdrawn on June 6 when we had
2 samples from seals that were within
3 the ETS guideline and was withdrawn on
4 June 26 when, again, we were within
5 the ETS guideline but were not
6 explosive in either case when properly
7 evaluated using a chromatograph.

8 And as I said before, Jim
9 Walter Resources has an on-site
10 chromatograph and had the analysis
11 before MSHA could get to the second
12 one-hour reading. And when I say
13 "MSHA," MSHA was on-site at the time
14 -- MSHA was there at the mine.

15 By the way, as far as our
16 chromatograph is concerned, we have a
17 -- actually, we have about four
18 chromatographs, which we routinely
19 operate. We've used it in fire
20 situations. MSHA, we've been in the
21 Round Robin with MSHA. If there's a
22 question -- matter of fact, in 2001,
23 MSHA operated on one shift with their

1 mobile lab, and we operated on the
2 other shift. And I don't remember
3 exactly, but we may have operated on
4 12 hours and 12 hours. So, I don't
5 think there's a question as far as the
6 validity of Jim Walter's chromatograph
7 and the accuracy.

8 The way the ETS is written
9 is too vague when left up to the
10 discretion of interpretation by each
11 District and miners are withdrawn
12 unnecessarily. The ETS should require
13 sampling of all pertinent gases and
14 require a true analysis of the
15 explosion nature of the sealed
16 atmosphere.

17 On June 27th after the mine
18 was shut down for being inside the ETS
19 guidelines of methane and oxygen, a
20 meeting was held with the District
21 Manager to discuss the Zabetakis
22 nose-curve and other things such as
23 how the overall atmosphere of the

1 internal part of the sealed area could
2 be determined using samples taken from
3 degas holes.

4 The results of samples taken
5 from numerous degas holes, which
6 reviewed with the District Manager to
7 show how when you get further from the
8 seal line, the atmosphere in the
9 sealed area becomes more inert.

10 This was also discussed with
11 Mr. Urosek during conversation with
12 him, and during this discussion the
13 question was asked, how do you know
14 that these results reflect what is the
15 atmosphere in the mine. I told him
16 that many of the samples throughout
17 when we've been collecting samples
18 from Jim Walter and we have been
19 actually have produced gas from degas
20 holes within the sealed areas for
21 years, that many of those type samples
22 will have CO₂ in them, which is
23 derived from oxidation of the coal at

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1 the mine level. And CO₂ being a heavy
2 gas, had to be coming from the mine.

3 Today, I brought with me and
4 will include in our comments and I
5 brought it but I will submit this to
6 MSHA at a later time with our actual
7 written comments, but two Isopachs.
8 One of which is methane within the
9 sealed area, and the other one is
10 oxygen.

11 Now, these Isopachs are
12 intended only to demonstrate to MSHA
13 how the vast majority of the sealed
14 areas inert, is only a very small
15 fringe line where leakage gets into
16 the sealed area, where the sealed area
17 may potentially get into the explosive
18 range. This doesn't mean that it is
19 in the explosive range. It's just to
20 demonstrate to MSHA how small these
21 zones are. You still have to look at
22 the CO2 that potentially could be in
23 the sample.

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1 These Isopachs are from a
2 fairly wide scatter of data points,
3 they do include the samples from where
4 leakage and the sealed points. But
5 the Isopachs give you an indication of
6 how air leaks into a sealed area and
7 migrates along the fringe line and is
8 influenced by the negative where the
9 fan, it will leak in on the high
10 pressure side and leak out on the low
11 pressure side.

12 These Isopachs also show
13 that the sealed areas are not
14 homogenous but vary in concentration.
15 For MSHA to expect that no sample
16 taken from the sealed area to ever be

17 in the explosive range is too much to
18 ask from any operator.

19 Just from the fact that the
20 area is sealed, means that it reacts
21 to barometric swings and will breathe
22 out on barometric lows and breathe in
23 on barometrics highs. And at certain

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1 times if the samples are taken when
2 the barometer swings from a low to a
3 high, this could be enough to
4 temporarily shift a sample into the
5 explosive range.

6 MSHA should recognize that
7 these phenomena will happen. And
8 there are times that a sample may be
9 in the explosive range does not
10 present a hazard to the miner if the
11 operator could demonstrate that this
12 area is small compared to the overall
13 size of the sealed area.

14 MSHA should consider a
15 tiered approach what action is
16 expected from the operator to the size
17 of this zone and the potential hazard
18 that it may represent. To withdraw
19 miners any time an explosive sample is
20 found without considering the history
21 of this particular sample and the
22 relationship to the rest of the sealed
23 area is impractical.

1 Why establish a baseline if
2 MSHA only intends to look at one
3 sample. Surely, a baseline is
4 required to get the history of that
5 particular sample. Why do a baseline
6 line if it's not going to be used.

7 MSHA in haste has developed
8 a regulation has made it virtually
9 impossible for the operator to comply
10 with. The regulation does not provide
11 for proper sampling of gases in sealed
12 areas, proper analysis of these gases
13 to determine if that experience
14 explosive, or consider the fact that
15 the sealed areas are not stable but
16 change with adjustments to the
17 ventilation and shifts to the
18 barometer.

19 The ETS talks about the
20 barometer, but nobody reacts to the
21 barometer. Nobody looks at shifts.
22 MSHA looks at one sample, these are
23 problem. MSHA has reacted as one

1 sample that might be in the explosive
2 range from one particular seal. No
3 matter how isolated it is from the

4 active works and they've withdrawn the
5 miners from the mine.

6 Operators cannot manage
7 their mines effectively under such
8 regulation. Sealing of abandoned
9 areas in mines provides for operators
10 to isolate older areas that are
11 deteriorating, it eliminates dangerous
12 areas that have to be maintained and
13 travel. It provides more effective
14 ventilation to the act of work and
15 allows the operator to abandon older
16 areas so that he can better manage the
17 remaining act of works.

18 Operators need a regulation
19 allows them to continue this. And
20 when an area is sealed, it is
21 permanently sealed and does not have
22 to be monitored and evaluated.

23 We applaud MSHA for setting

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1 criteria for a seal that can be built
2 by the operator that will allow this
3 to be accomplished. The standard for
4 the 120 psi seals is reasonable and
5 will greatly enhance the safety of
6 miners. But MSHA must continue to
7 help industry to come up with
8 construction techniques that can
9 easily be placed in the mines.

10 Matter of fact, under

11 comments that Jim Walter -- under the
12 NIOSH document, at that time, we
13 commented to MSHA that we thought 100
14 -- I don't remember the exact psi, but
15 it was 100 to 120 psi seal we thought
16 was reasonable. And it is reasonable.

17 But we need help evaluating
18 ideas such as building two barriers
19 some distance apart, pumping bulk
20 material such as rock dust or gypsum
21 between to provide the necessary
22 strength.

23 Research into construction

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1 techniques that can easily be done in
2 remote areas of the mine, should be
3 initiated. Industry has asked
4 Arlington, MSHA for assistance in how
5 to do this. I know MSHA put on their
6 web page a way of using concrete that
7 can be pumped. There's a lot of
8 difficulties with that and actually
9 doing it underground. We just
10 recently built one ourselves, and
11 there's a lot of complications with
12 that.

13 So, we believe, and our
14 company has not -- matter of fact, we
15 came out on the front end of the ETS
16 about the 120 psi seal. But there

17 needs to be more done to help the
18 operator be able to replace a seal in
19 remote areas, some of these can be up
20 to 1000 feet from a location where you
21 can easily access water and power and
22 be able to pump it to remote areas.
23 So, we're asking for assistance in

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1 that end.

2 I wanted to come to the
3 panel today because I've been a part
4 of NMA and DCOA and discussions early
5 on. I've talked to key players of the
6 panel such as John Urosek. I've
7 talked with Kevin Strickland. I've
8 been in the meetings. It's a very
9 important issue. It's an issue that
10 shuts mines down in our opinion
11 without valid reasons. Our No. 4 Mine
12 was shut down without valid reasons.
13 We were held because we were in the
14 position to technically evaluate it
15 properly, but yet we got no credit for
16 it, that's wrong.

17 Other companies are probably
18 in the same position. MSHA is in a
19 position, they've done in other areas
20 to try to have technology forcing. If
21 there's not an instrument that
22 accurately measures CO2, come up with
23 one.

1 If MSHA wanted it to happen,
2 it can happen. And I do believe there
3 are instruments, they may not be
4 perfect yet, but yet there is ways
5 that we can look at bad gases that
6 will give us a better indication.

7 If MSHA is -- if
8 chromatograph was something that was a
9 benefit, believe me, companies would
10 be looking at using chromatographs to
11 then shutting the mine down. But yet
12 MSHA has not recognized it. We need
13 MSHA to write this ETS with valid
14 signs and looking at is the
15 atmosphere, truly explosive or is it
16 not explosive, and we need MSHA to
17 recognize the fact that atmospheres
18 within sealed areas are not constant,
19 even though they're sealed, they're
20 still influenced by other factors such
21 as the barometer and even ventilation
22 adjustments that could be made.

23 What may be set up today as

1 far as the way the seal line reacts,
2 when you make an adjustment in the
3 active work side of the mine, it can

4 influence the atmosphere on the inside
5 of the sealed area.

6 So, anyway, that's the
7 reason that Jim Walter felt it was
8 important. We appreciate the panel
9 coming today to listen to us.
10 Hopefully, these comments will be
11 reviewed and taken into consideration.

12 And if there's any question,
13 I'll be happy to try to answer them.
14 And I apologize for being here at the
15 last minute. But, anyway, I hope I
16 didn't hold the panel up.

17 MS. SILVEY: Thank you, Mr.
18 McNider. In your comments, I'm sure
19 some of my panel members have
20 something to say. I have a few
21 opening comments. You talked about --
22 and I must say that the monitoring and
23 sampling requirement is an important

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1 aspect of the ETS. And you talked
2 about suggestions on monitoring that
3 has been given to MSHA but ignored in
4 the final rule.

5 And I will -- and you made a
6 number of other comments. So, one of
7 the things, overall things I'm going
8 to say, and I've been saying this to
9 everybody, you know, so we won't get
10 into a dispute over that right now.

11 What we talked about is how we move
12 forward and craft this rule in the
13 most workable manner, the safest
14 manner for miners and the most
15 workable manner to be implemented.

16 So, in terms of the -- and
17 yes, we do, just like you -- and I
18 think it may be implicit, that was
19 implicit in your comments, there are a
20 variety of mining conditions that this
21 rule has to address.

22 So, one of the things I
23 would ask you to do and anybody else

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1 who wishes to make comments is, when
2 you talk about the sampling and your
3 recommendations for the sampling, and
4 you said that you would send a written
5 copy, you would supplement this with
6 written -- follow-up with written
7 comments, be real specific with the
8 suggestions that you have for
9 sampling. Even if it includes
10 alternative language for sampling,
11 alternative language to the language
12 we include in the ETS.

13 You also talked about a
14 number, and I see we have our people
15 from District 11 here. We have our
16 District Manager here. You talked

17 about that a number of sampling errors
18 in the field that have caused mines to
19 shut down. And I assume, you mean
20 unnecessarily.

21 If we have committed a
22 number of sampling errors in the field
23 that have caused mines to shut down,

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1 I'd like for you to provide me with
2 examples of that.

3 MR. MCNI DER: Okay.

4 MS. SILVEY: I don't know
5 whether you -- one of the other things
6 you talked about was in terms of
7 sampling if there's an explosive area.
8 But it's not a hazard to miners if the
9 area is small in relation to the
10 entire sealed area. I think I recall
11 you saying that.

12 Could you explain that?
13 Tell me a little more what you -- you
14 said if the area is small. Do you
15 have some relationship to small in
16 terms of what you're talking about
17 there?

18 MR. MCNI DER: Let me expand
19 on that a little bit.

20 MS. SILVEY: Yeah. Expand
21 on that a little.

22 MR. MCNI DER: Right. Early
23 on what we talked about at Jim Walter

1 Resources, and more of this will be
2 followed up as far as the National
3 comments from NMA. So, it will get
4 into specifics about how the ETS we
5 believe should be rewritten. The
6 rationale of why we think it should be
7 rewritten a little bit different. So,
8 it will get into more specifics.

9 That's why at this meeting
10 today, I wanted to talk -- when you
11 asked about one particular mine that
12 was shut down, based on hand samples,
13 not given adequate time to follow-up
14 with chromatograph, that happened in
15 our No. 4 Mine. That's the case I'm
16 personally familiar with.

17 I know there are about eight
18 mines in discussions with NMA. I
19 believe there are other mines where
20 there is questions about errors in the
21 field, being able to sample.

22 I know when I looked at this
23 from the early on to try to find an

1 instrument out there that would
2 measure methane, oxygen, and CO₂,
3 they're not readily available. And I

4 don't know whether MSHA's panel has
5 looked at instruments.

6 Industrial Scientific offers
7 ones that reads higher levels of
8 methane with oxygen. I think there's
9 like a 620 and there's a 400,
10 something that I think is used in the
11 field. The only one that we were able
12 to find at the time was a CSE Drager
13 Miniwarn that would measure CO2. But
14 there's even complications with that
15 that we're coming to find out.

16 So, my reference was that
17 early on that MSHA -- that we
18 requested from MSHA, and when you take
19 samples from sealed areas, it's
20 different from reading it in just an
21 atmosphere. If there's one that maybe
22 has a slight differential out, you
23 need assistance through a pump, you

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1 need to make sure that you properly
2 guarded the instrument that you don't
3 get influence from the active work
4 side. There's more to sampling a
5 sealed atmosphere than just taking one
6 on the active work side.

7 So, what we discussed with
8 MSHA was about coming up with some
9 general guidelines and also some
10 instruments that would assist in doing

11 this. To my knowledge, that hasn't
12 been done yet.

13 To measure methane and
14 oxygen without looking at the other
15 pertinent gas, in our opinions, is
16 wrong. And we've looked at the CSE.
17 I've recommended to our company that
18 we definitely plan to look at CO2,
19 that's an inert gas that goes into the
20 composition of the atmosphere
21 explosive or not. I think John is
22 well aware of this just as well as I
23 am. So, for MSHA not to include that,

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1 is wrong. And that is what we asked
2 for early on from the industry.

3 The other thing that we
4 discussed back to the size of the
5 zones, typically, where most problems
6 -- and I'm talking about once a job
7 has stabilized, has gone through the
8 -- you know, when you initially
9 sealed, I'm not talking about that,
10 I'm talking about after some period of
11 time -- the primary zones that are
12 concerned are the ones trickling along
13 the fringe line right inside the seal.

14 And normally, they leak in
15 where you're furthest away from the
16 fan, and they typically leak out some

17 position closer to the fan. And it's
18 just a very -- the flow paths are
19 extremely small; therefore, those
20 zones are typically very small.

21 And when I give MSHA, and I
22 will furnish this with our comments.
23 Basically, what it does, we have very

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1 large gobs and we have a large number
2 of potential sampling points from
3 within the gob and it demonstrates
4 what I'm trying to point out to MSHA
5 that these zones that potentially
6 could be a problem are very small.

7 And they will react to
8 barometric swings, and they will react
9 to changes in ventilation. And,
10 typically, an operator may be able to
11 keep all of those points out of the
12 explosive range, but there are times
13 they could shift in and out based on
14 the changes in barometric influence.

15 What I'm trying to tell MSHA
16 is, there should be a tiered action to
17 what you do based on how large those
18 zones are and what the influence to
19 the mine is. And there will be other
20 language I think that will give you
21 better guidelines to exactly what
22 we're saying. I'm not ready to do it
23 today.

1 MS. SILVEY: For us to write
2 a regulation, conceptually, I
3 understand what you're saying. But
4 for us to put the mining community on
5 notice as to what our requirement is,
6 you've got to translate that concept
7 into some specific requirement. And
8 that's why I was asking you specifics.

9 MR. MCNIDER: I think you'll
10 get that.

11 MS. SILVEY: Okay. The
12 other thing we talked about -- I tell
13 you what I'm going to do, I'm going to
14 ask one more question, and then I'm
15 going take a break, if people don't
16 mind, and then Mr. McNider we'll
17 retake up with you.

18 One other question I have
19 before we take the break. You talked
20 also with respect to the sealed
21 strength. You said there were a lot
22 -- and one of the things I want to say
23 here is that, MSHA does want to

1 provide some type of guidance and
2 compliance guidance to the mine
3 community on the sealed strength and

4 designs. And to that end, I think
5 we've included some things on our
6 website for 50 psi and 120 psi sealed
7 applications.

8 But you talk about
9 complications when used in concrete
10 seals, particularly, in a remote area.
11 Could you expand on the specific
12 complication?

13 MR. MCNI DER: Sure. When
14 you're getting ready to pump a 3- to
15 5,000 psi concrete mix, which has a
16 lot of aggregate in it to bind it.
17 And I'm not a civil engineer, so
18 therefore I'm not going to try to go
19 into the, you know, the mechanics of
20 what happens to give you the 120 psi
21 strength.

22 But it's difficult to pump.
23 It is extremely -- when you start

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1 getting more remote from the sealed
2 area and get hundreds of feet from the
3 seal, which is not unusual in
4 underground workings, these areas also
5 start to somewhat deteriorate and
6 trying to get permissible equipment or
7 nonpermissible equipment into areas to
8 pump. It becomes difficult. And it's
9 limited as to how far you can pump
10 those type materials.

11 So, that's what I'm saying
12 is that we are requesting from MSHA to
13 give us some other work to come up
14 with other type techniques that where
15 you can get a 120 psi seal. It might
16 mean where you build barriers like a
17 brattish or a standard like what was
18 called a Mitchell-Barrett seal, which
19 is cross-course blocks. But in
20 between that to give it the 120 psi
21 strength, you can clump a bulk
22 material such as rock dust or gypsum
23 or something that will bind and give

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1 it the weight so it will resist the
2 explosive force. And those type
3 things you can pump quite a long ways.

4 That's what I'm saying that
5 MSHA needs to go back. They put on
6 their website how to build a concrete
7 or cement seal, but to actually do
8 that in the mine is difficult. I know
9 there are other companies that are
10 also out there that are trying to come
11 up with sealed techniques, which I do
12 know in time, I believe this will
13 happen.

14 But we request MSHA that
15 there are companies that need the
16 seals today. And what's in their web

17 page, I believe most companies will
18 struggle with putting that in the
19 mine.

20 MS. SILVEY: All right. We
21 will take up -- if you don't mind, we
22 will continue this with you after.
23 Can we, please, take maybe a five to

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1 ten minute break, no longer than ten
2 minutes. Thank you.

3 (Whereupon, a recess was
4 taken at this time.)

5 MS. SILVEY: Back on the
6 record. Continuing on with the Mine
7 Safety and Health Administration
8 Public Hearing on seals and abandoned
9 areas in underground coal mines.

10 Mr. McNider, one of the
11 things, and we have said this, the
12 panel members -- oh, before I move any
13 further, we have a number of people in
14 the audience who helped in drafting
15 this ETS. Maybe they don't want to
16 take credit for it now after all you
17 said about it. That's all right, I'm
18 sure they will. If they don't mind me
19 mentioning their names. Javier L.
20 Romanach with the Solicitor's Office.
21 They're looking for you Javier.
22 Roslyn Fontaine with the Office of
23 Technical Support. Richard Allwes

1 with the Office of Technical Support.
2 Dennis Swentosky. Dennis is with the
3 Coal Mine Health and Safety. And
4 David Hershfield who is an economist
5 in my office. And to do this ETS in
6 somewhat of a timely fashion, did
7 require a lot of resources. And so,
8 in addition, to the members on the
9 panel, those people that whose names I
10 mentioned also helped in drafting the
11 ETS.

12 But as I said before,
13 sampling, this whole sampling issue
14 has come at a number of the previous
15 hearings. I would like to say to
16 you-all that MSHA has a third set of
17 compliance questions and answers. And
18 I have said this earlier, but that set
19 of questions and answers should be
20 coming out very soon, and that should
21 provide some additional guidance to
22 the mining community. I'm sure it
23 won't be the end word, and I'm sure

1 that even after that set comes out,
2 there may be additional questions and
3 answers.

4 Also, MSHA will have a
5 procedure instruction method that
6 talks about how the Agency will sample
7 and will do other of the Agency's
8 activity, that should be coming out at
9 sometime soon. And all we can do is
10 encourage the mining community of any
11 time you have questions, you obviously
12 work through your district, your field
13 people, our field people, and also if
14 you have questions, you can feel free
15 to call us at headquarters at any
16 time. And we'll do the best we can to
17 address the situation. Sometimes it
18 may not always be the answer that you
19 want, but we'll try to address it as
20 best we can. So, I did want to make
21 that point.

22 At this point though, I'm
23 sure some members of the panel have

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1 comments that they might want to make.

2 MR. UROSEK: Tom, I'm
3 particularly interested, if you could
4 help us out with some information on
5 the Zabetakis curve. And in
6 particular, you mentioned safety
7 factor and what you feel may be
8 appropriate. I realize you might not
9 be in position to do that at this
10 moment, but if you could provide it in

11 your comments, in specific, to just
12 what your thoughts are and if there
13 should be a safety factor and how that
14 should be administered, using the
15 Zabetakis curve.

16 And particularly, if you're
17 familiar with the bottom of the
18 Zabetakis curve and that it rests
19 generally around five percent. And if
20 you use an R factor, it doesn't take
21 into consideration any safety factor
22 below that and how that could be
23 addressed; for example, instead of a

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1 nose curve that's at the same location
2 4.6 and 1, if it should be drawn below
3 that or whatever recommendation you
4 have in that.

5 MR. MCNIDER: John, we will
6 -- I'll incorporate that because I
7 mean that has been in discussion.
8 I'll just say one thing about it today
9 and I'd rather wait to comment as an
10 official from Jim Walter and make sure
11 what our position is going to be.

12 In the Zabetakis nose-curve
13 on page 3 I did in my verbal, it does
14 have a small safety factor built in it
15 today. So, there is one incorporated.
16 It's in the literature from the IC,

17 and that's on page 3 I believe. But
18 we will comment on that.

19 MR. UROSEK: Okay. I
20 appreciate that. And you also
21 mentioned in sampling different areas,
22 you mentioned the small volume of
23 potentially explosive area versus the

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1 large area of the gob that may be
2 inert. And I know Pat asked you this
3 specifically, but I'll just repeat
4 that because it's real important to us
5 to have a feel for how big that zone
6 really is. If there is any way or any
7 information that you may have that can
8 quantify that for us and is specific
9 in relation to where that zone
10 potentially could be in relation to
11 where the seals are. That would be
12 very helpful to us.

13 MR. MCNIDER: Yeah. We will
14 do that also.

15 MR. UROSEK: You had
16 mentioned about different samples that
17 you've taken in sealed areas in
18 relation to your fans; for example,
19 some that are under lower pressure,
20 some are under higher pressure. And
21 that has been something that we've
22 considered. But we would appreciate
23 your input into that.

1 Especially, as it relates to
2 what can be done in those factors and
3 also how that affects that particular
4 zone of where there might be the
5 potential for explosive mixture and
6 how large that may be. And anything
7 that you may have tried to solve that
8 issue would be very important to us.

9 MR. MCNIDER: One thing I
10 told Pat earlier, John, you know, I've
11 worked with NMA as part of that
12 committee. And I think you will, from
13 the NMA, will see a lot of what our
14 thoughts are about specifics, about
15 size of the zone, what your trigger
16 and action level, some other things.

17 So, I think more of that,
18 but I'll follow-up on that. If it
19 doesn't come through the NMA, it will
20 come through us.

21 MR. UROSEK: Whether you
22 have some particular practical
23 experience from actually doing it in

1 your mind, which sometimes it may be
2 far from the overall picture, but that
3 that particular knowledge will be

4 helpful for us. You mentioned the
5 barometer and the changes that can
6 occur at the sampling location.

7 Any information that you
8 could help us with the barometer
9 changes, we acknowledge as you've
10 said, there's going to be a time
11 period when the atmosphere is going to
12 change behind the seal at the sampling
13 location, and there's going to be a
14 zone in particular at that location,
15 that sampling location, that may
16 change from nonexplosive to explosive
17 for a period of time.

18 But how large of an
19 explosive zone does that represent.
20 If you have any information that could
21 help us quantify that and make that
22 determination; for example, is it just
23 five feet, and it's just right at the

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1 sampling point, and then, it
2 disappears as the barometer continues,
3 or does that zone get larger.

4 Anything that you could
5 provide to help us with that, we would
6 greatly appreciate.

7 MR. MCNIDER: I brought
8 something with me today, John, but I
9 don't want to provide it because I
10 haven't even visually gone through the

11 accompanying set, and I don't have
12 these in writing. I will give you
13 that. It was those isopachs I talked
14 about.

15 Gives you kind of -- it's
16 like, you can't use it and say, yeah,
17 this is contour line and this is this
18 one. It gives an indication of how it
19 reacts, which is what you're asking
20 for, using internal holes as part of
21 the data base to give you the network
22 to isopach it.

23 So, I do have that. I will

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1 furnish that to you to give you an
2 idea about what I'm talking about and,
3 you know, where these areas are.

4 That's been discussed with
5 MSHA I know talking about that they
6 should look at this in a tiered
7 approach because I don't think at all
8 times operators can guarantee you'll
9 never have one or two points that are
10 potential to swing in and out of that
11 zone.

12 So, there will be -- I think
13 you'll get other information about
14 this. I know I'm planning on
15 providing this to you. And I will get
16 that. And I think from the National

17 comments you'll see more of what I'm
18 talking about.

19 MR. UROSEK: And one of the
20 things, I don't know if it does
21 address, but I hope that it would, is,
22 you know, we acknowledge what occurs
23 in a gob area, particular in your gob

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1 areas where you're looking at multiple
2 long holes that are sealed together
3 and the atmosphere that you may be
4 able to get from your degasifications
5 and sampling, but how did that relate
6 to the atmosphere that may be in the
7 open entries; for example, the mains
8 that may be connected with that. And
9 in particular, we're interested in
10 what the extent of potential explosive
11 mixture may be in those open areas and
12 how that relates to the sampling that
13 you have in your degas holes.

14 Any information on that,
15 that help us clarify that would be
16 greatly appreciated.

17 MS. SILVEY: I'll just
18 follow-up. I guess what John is
19 saying, to draw the tent, you talked
20 about the samples from the degas hole
21 to show that they are representative
22 of what is in the sealed area.

23 MR. UROSEK: And in

1 particular, those areas that are the
2 open entries that may be in front of
3 the actual gobs themselves. And
4 anything to tie that together. We
5 would greatly appreciate that.

6 MR. MCNIDER: One thing I
7 will say about, when you get into the
8 sealed area, you know, then it starts
9 to act like it's sealed, like a glue
10 of somewhat; although, there's leakage
11 in and out of it, which we talked
12 about a long fringe lines because it's
13 not perfectly sealed.

14 But once it is sealed as you
15 get more and more remote, it tends to
16 become -- it's not homogenous because
17 you can vary it, depending on what you
18 do at certain points. And, you know,
19 I don't believe it's a homogenous
20 mixed throughout, you've got layering
21 and all kinds of things that are.

22 But as you can remove more
23 from the sealed fringe line and you

1 get more internal to the gob, then I
2 do think that as you get collection
3 points, they do tend to represent what

4 is more in the atmosphere for that
5 complete sealed area.

6 And there are -- and, you
7 know, I'll try to expand on that a
8 little bit.

9 MR. UROSEK: And any data
10 that you have, and I'm sure your
11 comments, and I know we've asked for
12 this, any information as far as the 15
13 sampling pipe versus the sampling pipe
14 that extends into the cross-cut and
15 your thoughts on that area would be
16 important to us.

17 MR. SHERER: Mr. McNider, I
18 understand that you are a major
19 producer of coal bed methane?

20 MR. MCNIDER: We are a
21 producer of coal bed methane, yes.

22 MR. SHERER: You produce
23 what is commonly called gob holes in

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1 your active panels, don't you?

2 MR. MCNIDER: Yes.

3 MR. SHERER: What's the
4 composition of that coal bed methane?

5 MR. MCNIDER: Well, let me
6 describe that a little bit to you
7 because I think this is a little
8 confusing to MSHA.

9 MR. SHERER: Sure.

10 MR. MCNIDER: When you have

11 an active panel and you go through and
12 you get the cave and you expand the
13 upper strata or collapse the upper
14 strata and whatever other coal seems
15 that may be in that upper strata and
16 from the mine, particular mine, the
17 fractured zone right at the mine
18 level, initially, you're going to get
19 a high production rate of methane,
20 which will, typically, in our case, is
21 extremely high. It's pretty much
22 pipeline quality gas, which is 95
23 percent plus. And that varies with

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1 how hard you produce it.

2 But those wells are on a
3 fairly rapid decay curve; in other
4 words, once you put one of those on
5 line, typically, by the time the panel
6 is mined out, they have greatly gone
7 down in their production rate and
8 their decay is rapid.

9 So, therefore, as you move
10 to the next panel, it continues to
11 decline, and it gets to the point
12 where eventually those wells can be
13 just shut in and have very very
14 minimal impact.

15 So, as the gob or as you
16 mine adjacent panels and you go with

17 time, those holes then become less and
18 less active as far as just methane.
19 Now, when you shut them in, they can
20 charge to some degree, but they're
21 easily drawn back down typically. And
22 because it's not like when you first
23 go under.

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1 So, therefore, depending on
2 how much negative and how much you
3 produce from those wells, the old
4 abandoned wells, you can pull --
5 you're actually, you're pulling less
6 from the wellbore, which you might be
7 initially, and you're pulling more
8 from the horizon at the mine level.

9 That's why I indicated to
10 John that these don't. When you have
11 an active well that's in the active
12 gob in the panel you're mining that's
13 just come on line, those are pretty
14 much very inert like John and I
15 discussed. And they're all close to
16 100 percent methane. You want them as
17 high as you can.

18 But in time, that decay
19 curve allows less and less methane to
20 be produced through those type holes.
21 And actually, when you look at the
22 average production from one of those
23 wells that have been into the mine for

1 an extended period of time, typically,
2 they run about 60 percent methane,
3 they run about 3 to 5 percent oxygen
4 or -- well, I say 3 to 5, a very low
5 amount of oxygen. And the rest of it
6 is nitrogen and excess nitrogen and
7 CO2.

8 So, that's why when I
9 discussed this with John from our
10 experience, these wells do become good
11 indicators of what is in the internal
12 part of the sealed area. They're as
13 good a indicator as you would have
14 because basically nobody has a number
15 of boreholes that go into the mine
16 environment.

17 So, a degas hole is a good
18 tool to use to get a representation
19 what is further and further remote
20 from the fringe of the seal line.

21 MR. SHERER: So, you have a
22 tube that goes down to the actual
23 mined out area?

1 MR. MCNIDER: No. The way
2 the well is originally put in, is it's
3 drilled within about 40 feet of the

4 active mines. But then when the mines
5 under and it fractures, it
6 communicates with it.

7 And what I'm saying is, that
8 as an indication of how these wells
9 are reacting to the gases at the mine
10 level, these holes are cased to about
11 halfway within the mine level, the
12 rest of the way, it's open hole with
13 limited influence from any other kind
14 of coal that could possibly oxidize.

15 And to my knowledge, there
16 are no CO2 type. There's no way that
17 CO2 -- there's no CO2 that's
18 introduced from the borehole. So, as
19 you produced this, you're getting more
20 of an influence at the mine level.
21 And many times, these holes actually
22 see high percent levels of CO2, which
23 is formed from blackdamp, which is an

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1 inerting process from the gob.

2 And as you produce this,
3 you're seeing the inert gas CO2, which
4 is a heavy gas, which would layer
5 closer to the mine port. Even though
6 those holes stop at about 40 feet
7 above the mine level when they're
8 first put in, they are actually
9 communicating with the mine level, in
10 my opinion because they do see CO2.

11 They do see gases. They see some
12 oxygen, which originates from the
13 mine. It's the only way it can get
14 there.

15 Q. What's the rank you're
16 calling?

17 A. I'd have to -- I'm not sure.
18 I can tell you this, it's not a
19 SPONCOM type code. I think it's a low
20 rank code. It does not readily --
21 it's fairly slow to oxidize.

22 Q. Is it less than 20 percent
23 of a ball from there?

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1 A. No. The ball runs from a --
2 a low ball, which could be 18 to 20 to
3 a higher ball, it's about 28.
4 Something like that.

5 MR. SHERER: Isn't CO2 a
6 common strata gas with lower rank
7 coals, part of the coalification
8 process?

9 MR. MCNIDER: We did a
10 pristine gas back early on when we
11 first got into degasification. And,
12 basically, what we see in our
13 situation is, you're about 99 percent
14 methane, a little bit of hydrogen.
15 And I'm trying to remember what the
16 remainder was. I think it was -- I'd

17 have to go back and look.

18 But it was mostly 100
19 percent methane with a little bit of
20 hydrogen in it. And there was one
21 other gas, but I can't remember what
22 that was.

23 MR. SHERER: Thank you.

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1 MR. UROSEK: A couple more
2 questions. One of the important
3 issues that came up recently, was
4 leakage factors through the seals; in
5 other words, how much does the seal
6 leak. And it seems to be more of a
7 determination, not so much leakage
8 through the actual material of the
9 seal, but through the strata.

10 If you have any information
11 you could give us and any help on the
12 amount of cubic feet per minute,
13 typically that you see through a seal,
14 that would be very helpful to us.
15 Especially, in your coal that's more
16 prime than other coal and is rated a
17 little higher than average. The other
18 question was on the -- you mentioned
19 about samplings for CO₂.

20 And I'd appreciate, we would
21 appreciate if what your thoughts would
22 be on how we could actually tie that
23 in to the rule and sampling. I mean

1 methane and oxygen is a straight mix,
2 we're all familiar with how to deal
3 with that.

4 But how would you -- what's
5 your suggestions on dealing with if
6 CO2 is a factor that affects the
7 explosibility without going with
8 Zabetakis curve, and how do you tie
9 that in or suggest tying that in,
10 would be appreciated.

11 MR. MCNIDER: One way, John,
12 and I did this. It's in the comments
13 that I gave you today, and it's
14 something that could be done. The
15 primary gas in most sealed areas and
16 low oxidation is CO2, methane, oxygen,
17 and nitrogen.

18 So, if those are the
19 components that equal 100 percent, and
20 it's not going to be exact. I mean,
21 because you are going to have a few
22 DPM of CO, and you're going to have
23 some of eventually maybe nitrogen.

1 But, like, I said, that's
2 one of our pristine gases when you
3 seal it. But you could get an

4 extremely -- MSHA could get a very
5 good guide even that you could do at
6 the mine level. And there's probably
7 other ways I haven't really thought
8 about that you could calculate its
9 flexibility.

10 But one way and I think it
11 was like page 5, it's in my --
12 verbally in the comments. You could
13 go through there and take those gases
14 and come through and you could do the
15 Zabetakis based on a hand reading, but
16 you need CO₂. And it's important that
17 MSHA gets an instrument that we can
18 measure CO₂ with.

19 CO₂ is a critical factor in
20 this. In my opinion, you've got to
21 consider CO₂, you can't leave it out.
22 I think you would agree to that. If
23 you just look at methane and oxygen on

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1 their own, it's badly misleading. So,
2 that's one way. I know today sitting
3 here I can tell you you can do it that
4 way as an indicator. There may be
5 others, I'd just have to think about
6 that.

7 MR. UROSEK: If you have
8 anything specific you can supply us on
9 that, we would appreciate it.

10 MS. SILVEY: One of my panel

11 members wrote me a note and said that,
12 Tom, you were busy writing down some
13 of the questions we asked you. But
14 I'll remind everybody that the
15 transcript is going to be on the
16 website about a week after today.

17 But even as I remind you of
18 that, I would say to you, Tom, but the
19 comment period closes August 17, so,
20 you probably want to get on your
21 questions anyway. So, it's probably a
22 good thing that you're writing them
23 down anyway.

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1 MR. UROSEK: I know we've
2 asked Tom a lot of specific questions
3 because he's the one at the panel at
4 the moment. But if anyone has any
5 information on a lot of the questions
6 that we asked that they can help us
7 with, we'd appreciate that
8 information.

9 MS. SILVEY: The transcript
10 will be on the web approximately one
11 week after today's hearing. So, it
12 should be on there at approximately
13 next Thursday. And I think that's
14 July 26th I think.

15 I think those are all the
16 questions that we have, Mr. McNider.

17 So, thank you very much. Again, we
18 appreciate your comments and your
19 testimony. And we look forward to
20 getting supplemental comments from you
21 by time the record closes on August
22 17.

23 MR. MCNIDER: Well, I

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1 appreciate the opportunity to address
2 the panel today. So, I appreciate it.

3 MS. SILVEY: Thank you. At
4 this point, I would ask if there is
5 anybody else who wishes to make
6 comments, you can be start getting
7 yourself ready. We will take anybody
8 else who wishes to make comments or
9 testimony. Anybody else? Okay.
10 Nobody.

11 Well, if nobody else wishes
12 to make comment or provide testimony,
13 then I want to say that on behalf of
14 the Labor Department, we appreciate
15 your participation in this ruling.
16 And I do want to point out that for
17 those of you who came but did not
18 provide comment or testimony, we
19 appreciate the fact that you're here
20 and the fact that you're here is
21 evidence to us that you have an
22 interest in this rule making and
23 that's important to us too.

1 I want to say again for the
2 benefit of everybody that the record
3 will close on August 17th. We
4 encourage you to either supplement any
5 information that you provided to us so
6 far or to make sure if you have
7 anything to say to us, to get that in
8 to us in Arlington before August 17th.

9 And as you've heard me say
10 too many times, when you provide your
11 comments, you heard us asking and
12 encouraging Mr. McNider and others who
13 have testified before, please, be as
14 specific as possible as you can.

15 When you provide your
16 conclusions to us, things that are
17 complications in the rules, things
18 that are difficulties, tell us exactly
19 where the complications are, where the
20 difficulties are.

21 If you have suggestions for
22 how we might sample differently,
23 please, provide specific alternatives

1 if you have those, specific language.
2 That will help us to as we move
3 forward and craft the final rule.

4 If nobody else wishing to
5 testify then, I'm going to attentively
6 draw this hearing to a close. And
7 what that means is; however, that we
8 will be here until approximately 1:00
9 o'clock in case somebody else shows
10 up. If nobody else shows up, then, I
11 will not reconvene the hearing, and we
12 will consider it closed at this point.

13 And, obviously, if somebody
14 else shows up, we will take that
15 testimony. But at this time, the
16 hearing is closed. Thank you.

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