

Transcript of the Testimony of Gary Sergent

Date: September 28, 2010

Case:

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STATEMENT UNDER OATH

OF

GARY SERGENT

taken pursuant to Notice by Alison Salyards, a Court Reporter and Notary Public in and for the State of West Virginia, at The National Mine Health & Safety Academy, 1301 Airport Road, Room C-137, Beaver, West Virginia, on Tuesday, September 28, 2010, beginning at 10:37 a.m.

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- 12
- Welch Regional Office 14
- 891 Stewart Street 15
- 16 Welch, WV 24801-2311

17

- JOHN SCOTT 18
- West Virginia Office of Miners' Health, 19
- Safety and Training 20
- 21 Westover Regional Office
- 14 Commerce Drive 22
- 23 Suite 1
- 24 Westover, WV 26501

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 1
              APPEARANCES (cont.)
 2
 3
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     Miner Safety Health Administration
 4
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 5
     Barbourville, KY 40906
 6
 7
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     BETH SPENCE
     West Virginia Independent Investigation
 9
    (b) (7)(C)
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- 1 PROCEEDINGS
- 3 ATTORNEY BAXTER:
- 4 My name is Derek Baxter. Today is
- 5 September 28th, 2010. I'm with the Office of the
- 6 Solicitor, U.S. Department of Labor. With me is Jasey
- 7 Maggard, an accident investigator with the Mine Safety
- 8 and Health Administration, MSHA, an agency of the
- 9 United States Department of Labor. Also present are
- 10 several people from the State of West Virginia. I ask
- 11 that they state their appearance for the record.
- 12 MR. SCOTT:
- 13 I'm John Scott. I'm with the West
- 14 Virginia Office of Miners' Health, Safety and
- 15 Training.
- 16 MR. O'BRIEN:
- 17 John O'Brien, with the West Virginia
- 18 Office of Miners' Health, Safety and Training.
- 19 MS. SPENCE:
- 20 Beth Spence, with the Governor's
- 21 independent investigation.
- 22 ATTORNEY BAXTER:
- 23 There are also several members of the
- investigation team present in the room today. Mr.
- 25 Maggard, Mr. Scott and Ms. Spence will be conducting

- 1 the questioning today.
- 2 All members of the Mine Safety and Health
- 3 Accident Investigation Team and all members of the
- 4 State of West Virginia Accident Investigation Team
- 5 participating in the investigation of the Upper Big
- 6 Branch Mine explosion shall keep confidential all
- 7 information that is gathered from each witness who
- 8 voluntarily provides a statement until the witness
- 9 statements are officially released. MSHA and the
- 10 State of West Virginia shall keep this information
- 11 confidential so that other ongoing enforcement
- 12 activities are not prejudiced or jeopardized by a
- premature release of information. This
- 14 confidentiality requirement shall not preclude
- investigation team members from sharing information
- 16 with each other or with other law enforcement
- officials. The team members' participation in this
- 18 interview constitutes their agreement to keep this
- information confidential.
- 20 Government investigators and specialists
- 21 have been assigned to investigate the conditions,
- 22 events and circumstances surrounding the fatalities
- 23 that occurred at the Upper Big Branch Mine-South on
- 24 April 5th, 2010. The investigation is being conducted
- 25 by MSHA under Section 103(a) of the Federal Mine

- 1 Safety and Health Act and the West Virginia Office of
- 2 Miners' Health, Safety and Training. We appreciate
- 3 your assistance in this investigation.
- 4 You may have your personal attorney
- 5 present during the taking of this statement or another
- 6 personal representative, if MSHA has permitted it, and
- 7 may consult with your attorney or the representative
- 8 at any time. And for the record, do you have a
- 9 personal attorney or representative with you here
- 10 today?
- 11 MR. SERGENT:
- 12 No.
- 13 ATTORNEY BAXTER:
- 14 Your statement is completely voluntary.
- 15 You may refuse to answer any question and you may
- 16 terminate your interview at any time or request a
- 17 break at any time. Your identity and the content of
- this conversation will be made public at the
- 19 conclusion of the interview process and may be
- 20 included in the public report of the accident unless
- 21 you request that your identity remain confidential or
- 22 your information would otherwise jeopardize a
- 23 potential criminal investigation. If you request us
- to keep your identity confidential, we will do so to
- 25 the extent permitted by law. That means that if a

- judge orders us to reveal your name or if another law
- 2 requires us to reveal your name or if we need to
- 3 reveal your name for other law enforcement purposes,
- 4 we may do so. Also, there may be a need to use the
- 5 information you provide to us or other information we
- 6 may ask you to provide in the future in other
- 7 investigations into and hearings about the explosion.
- 8 Do you understand?
- 9 MR. SERGENT:
- 10 Yes.
- 11 ATTORNEY BAXTER:
- 12 Do you have any questions?
- 13 MR. SERGENT:
- 14 No.
- 15 ATTORNEY BAXTER:
- 16 After the investigation is complete, MSHA
- will issue a public report detailing the nature and
- 18 causes of the fatalities in the hope that greater
- 19 awareness about the causes of accidents can reduce
- 20 their occurrence in the future. Information obtained
- 21 through witness interviews is frequently included in
- these reports. Since we will be interviewing other
- 23 individuals, we request that you not discuss your
- testimony with any person aside from your personal
- 25 representative or counsel.

- 1 A court reporter will record your
- 2 interview. Please speak loudly and clearly. If you
- do not understand a question asked, please ask us to
- 4 rephrase it. Please answer each question as fully as
- 5 you can, including any information you've learned from
- 6 someone else.
- 7 I would like to thank you in advance for
- 8 your appearance here. We appreciate your assistance
- 9 in this investigation. Your cooperation is critical
- in making the nation's mines safer. After we have
- finished asking questions, you'll have an opportunity
- to make a statement and to provide us with any other
- information that you believe to be important. If at
- any time after the interview you recall any additional
- information that you believe might be useful, please
- 16 contact Norman Page of MSHA at the telephone number or
- 17 e-mail address provided to you. Will you please swear
- in the witness?
- 19 ---------
- 20 GARY SERGENT, HAVING FIRST BEEN DULY SWORN, TESTIFIED
- 21 AS FOLLOWS:
- 22 ----------
- 23 EXAMINATION
- 24 BY MR. MAGGARD:
- Q. Gary, would you please state your full name and

- 1 spell your last name for us, please?
- 2 A. Gary Lee Sergent, S-E-R-G-E-N-T.
- 3 Q. And could you provide your address and telephone
- 4 number, please?
- 5 A. Address, (b) (7)(C) , that's
- 6 **(b)** (7)(C) You
- 7 said phone number as well?
- Q. Please.
- 9 A. Do you want home or office?
- 10 Q. Office.
- 11 A. Office phone number is (276) 988-5505.
- 12 Q. Gary, tell us a little bit about your background
- as far as mining experience, what you do now, and a
- 14 little bit about what you do for Pyott-Boone, please.
- 15 A. Okay. I graduated Bluefield State College in
- 16 2000, and started for work at Pyott-Boone Electronics
- that year, January 1st of 2000. Have been a sales ---
- 18 I was a sales engineer for the first several years
- 19 there and I'm currently a project manager over the
- 20 communications and tracking products.
- 21 During my college years I worked for Consol Energy
- in the engineering student program that they had. I
- 23 received my black hat during those years. Spent three
- years underground --- or three summers underground and
- 25 three summers with the de-gasification projects. So

- for the last four years, since 2006, roughly about the
- time of Sago, when I was tasked with communications
- and tracking, that has been what I have done for the
- 4 last four years, is worked on the mine comm leaky
- 5 feeder systems and the Pyott-Boone tracking.
- 6 Q. Tell us a little bit about the tracking system,
- 7 how it works, talk about ranges, frequencies, whatever
- 8 you can tell us to help us understand how it works.
- 9 A. Okay. The Pyott-Boone tracking boss system, as we
- 10 call it, is what they call an RFID zone-based system.
- 11 A tag reader will be located at various intervals that
- 12 meet all regulatory requirements, such as the MSHA
- 13 PPL. It will detect the tag that a user or a vehicle
- 14 is quipped with as it passes by. The tag operates at
- 15 924 megahertz. The tag reader itself is dependent
- 16 upon the system it's in. The one that was at UBB was
- 17 what we call UHF, so it operated at approximately 488
- 18 megahertz on the receive, and transmitted at
- 19 approximately 456 megahertz. The maximum detection
- 20 range that we've seen on this system has been
- 21 approximately 700 feet. That's been in entries where
- there is no metal objects to obstruct signal, such as
- an intake. Typically in belt and track entries we've
- seen 200 to 300 feet. That's based on a mine height
- of 75 inches. As the mine height goes down, then so

- 1 does the signal range.
- 2 Q. Okay. The radios, as far as the leaky feeder
- 3 communication, that would be the same frequency as
- 4 your tag reader repeater portion, which is 4000 ---?
- 5 A. Yeah. The radios themselves are approximately 487
- 6 and 457.
- 7 O. And that would be VHR or ---?
- A. UHF.
- 9 O. UHF?
- 10 A. Uh-huh (yes).
- 11 Q. As far as work that was done at UBB, what part did
- 12 you play in getting the system installed at UBB?
- 13 A. Nothing hands on. I left UBB mostly up to the
- 14 guys that work under me.
- 15 O. Okay. And who all did you have working under you
- 16 that went --- that was involved with UBB's
- 17 installation?
- 18 A. Dave Childress and Wes Leffel were there on a few
- 19 occasions. I don't recall if we had anyone else
- there.
- 21 Q. Okay. And when did this project start?
- 22 A. I'm afraid I just don't really remember that
- 23 information. I'd have to go back and look at my
- 24 records.
- Q. Do you keep copies of all purchase orders?

- 1 A. Keep copies of all purchase orders, all service
- 2 reports.
- Q. Is there a possibility that I could get a copy of
- 4 those?
- 5 A. Yeah.
- 6 Q. Maybe, you know, what was ordered, not --- I don't
- 7 need --- I'm not interested in costs or anything, you
- 8 know, just as far as when it was ordered and when it
- 9 was delivered.
- 10 A. Okay. If someone can make me a note. I didn't
- 11 bring ---.
- 12 Q. I think that will be good.
- 13 A. I know approximately ten days prior to the
- 14 explosion we had been there on a service call and had
- helped install a few more tag readers, but the system
- 16 was not fully installed at the time. And I believe
- 17 --- and Dave is more familiar than I am. I believe
- the last tag readers were approximately this area.
- 19 Q. And I believe that he's pointing to around the
- 20 Mother Drive area. And that's where David had
- 21 mentioned earlier today. What kind of problems had
- 22 the company had with the installation? I mean, what
- 23 was --- why was they kind of slow about getting it
- installed and ---?
- 25 A. UBB was the biggest mine that we had ever

- installed a system in, and we ran into a problem that
- we did not realize existed. We reached a point where
- 3 communications and tracking data did not function, and
- 4 so we researched the project with the help of the
- 5 electricians at UBB and we determined that we needed
- to change the frequencies to make them more optimal
- 7 through the leaky feeder amplifiers. And that we had
- 8 just changed those frequencies on that service call
- 9 ten days prior to the accident that I referred to, so
- it was sort of our not understanding of our own system
- 11 that prevented them from going farther until we
- 12 resolved that. And we did get everything up and
- running ten days prior to and found that those
- 14 frequencies worked and --- because I think because of
- the Easter holiday, that's what sort of, you know,
- 16 slowed down them actually installing the rest of the
- 17 units.
- 18 O. So what did you have to do to change the
- 19 frequencies? What does that entail?
- 20 A. It's reprogramming the modem card inside the tag
- 21 readers.
- Q. And how --- I mean, I'm kind of unsure about, you
- know, the radio frequency. It's a set frequency or is
- there different channels that are closer to the
- 25 frequency that you need, or how does that work?

- 1 A. Well, the frequencies can be anything that we
- 2 choose as long as it falls within the filters of the
- 3 leaky feeder equipment. So we had picked frequencies,
- 4 you know, that we thought would be good. And then
- 5 when we actually put them in, like I said, we found
- 6 out that we were hitting sort of an invisible wall
- 7 where they didn't want to travel that many miles on
- 8 the cable, and so our engineers did some more testing
- 9 and found some more optimal frequencies that actually
- 10 would travel more distance, and that is what we
- 11 changed to.
- 12 Q. As far as amplifiers go, how often do you have to
- add an amplifier to the system?
- 14 A. The distance varies. When there is nothing
- between amplifiers, just cable, it's 1,148 feet. If
- there would be anything in between those amplifiers,
- though, such as a branch to split the line or a power
- 18 coupler to insert voltage onto the line, then we
- 19 reduce the cable distance to compensate for the
- 20 insertion loss of that device.
- Q. Since you didn't go to UBB, do you have any idea
- when the last order prior to the accident was? Had
- 23 they had a late order of some stuff or do you think
- they had enough stock there to complete the system?
- 25 A. I believe they had enough stock on site. I'm

- 1 pretty sure they did.
- 2 O. How familiar are you with the CO systems you guys
- 3 sell?
- 4 A. I'm actually very not informed.
- 5 Q. How about the event recording of your mine boss
- 6 system?
- 7 A. I know that it does record and it changes its
- 8 values, alarm and warning conditions for any of our
- 9 devices that are connected into the system.
- 10 Q. Okay. And let's talk about response times.
- 11 What's an average response time to say a data loss, a
- line is cut in on the system or a CO alarm, how quick
- could those alarms come in or a tag reader alarm
- 14 or ---?
- 15 A. There's a difference between the tag reader system
- and the CO system. The tag reader system reports all
- information over the leaky feeder cable wirelessly.
- 18 So that polling time is actually faster. I'm not sure
- 19 how much faster, but typically within 20 to 30 seconds
- our computer would poll readers and get that
- 21 information back.
- 22 The CO system that was installed at UBB is what we
- 23 call 320 baud. The system was purchased, I believe,
- sometime in the '90s, so therefore was our slowest
- 25 version. The faster version that we sell as a default

- 1 now did not come out until sometime after UBB had
- 2 purchased their initial system. So that's why their
- 3 CO system was a bit slow for a mine this size. Our
- 4 engineers would have to calculate what kind of delay
- 5 speeds we would see typically over this kind of a
- 6 distance, but I believe it does end up being several
- 7 seconds as in possibly a minute.
- 8 Q. Now, if, say, you know, we had an explosion of
- 9 quite a large magnitude here and a lot of different
- 10 components got damaged at one time, we had a lot of
- data losses that come in, you know, pretty much, you
- 12 know --- a big bunch of them, a lot of addresses were
- lost, would that speed the response time up somewhat
- because there's so many different addresses coming in
- 15 that are in alarm, that the communications is not
- 16 there? Would that make it faster or slower ---
- 17 A. I believe ---.
- 18 O. --- versus one address that was lost?
- 19 A. I believe slower. I would actually have to check
- 20 with my engineering department because the computer
- 21 polls those addresses. When it's initially set up,
- it's told that there's this unit at this address, and
- 23 so then it polls that address. But I do not know what
- happens when it's waiting for an address to respond.
- I don't know if it gives up and moves on to the next

- one. I'm sure it does, but I don't know after what
- 2 time period, okay.
- Q. Okay. So if it polls that one address and it
- 4 doesn't get anything, does it wait until it gets back
- 5 to it again after it polls all the rest of the
- 6 addresses?
- 7 A. That's my understanding.
- Q. Okay. I would like to know that and maybe
- 9 possibly --- I know we've requested that Wes Leffel
- 10 come here and do an interview maybe next week, if
- 11 possible.
- 12 A. Okay. I have not heard that.
- Q. Well, I didn't know if you did or not. But I'd
- 14 like to get that information if at all possible.
- 15 A. Okay. I can make sure he gets that information so
- 16 he can tell you.
- Q. I know that --- I guess Mr. Godsey --- is that
- 18 Adam Godsey, ---
- 19 A. Adam Godsey.
- 20 Q. --- is a good resource for that?
- 21 A. He's an excellent resource, uh-huh (yes).
- 22 Q. That would be great.
- A. Would you like to interview him as well?
- Q. Well, I would like --- I know you guys -- I think
- 25 you guys kept a copy of --- did you keep a copy of the

- 1 UBB data?
- 2 A. Yes, we did.
- Q. Okay. What I would like for you to do is look at
- 4 the 1508 time frame on April 5th and look at all the
- 5 data that was lost as far as communication, ---
- 6 A. Uh-huh (yes).
- 7 Q. --- all the addresses and, you know, give me some
- 8 scenarios of, you know, the time lag on that, how slow
- 9 that data could be.
- 10 A. Okay.
- 11 Q. As far as CO sensors go, what do you know about
- their capabilities as far as concentrations that they
- work in?
- 14 A. I think they're rated range is zero to 120 parts
- 15 per million.
- Q. And I assume they're --- are they catalytic,
- 17 electrochemical? What type of ---?
- 18 A. They are a chemical reaction.
- 19 Q. Okay. And is there a certain level of oxygen that
- they need to receive to read accurately?
- 21 A. Not that I'm aware of.
- 22 Q. Is there a certain CO percentage that --- is there
- certain conditions that would burn up a sensor or
- 24 damage it?
- 25 A. I don't have enough information to answer that

- 1 question.
- Q. I may ask Wes or Adam about that?
- 3 A. I can ---.
- 4 Q. Send word with them?
- 5 A. I can tell Wes that you're needing these answers,
- 6 and he can find out from Adam.
- 7 Q. That would be great.
- 8 MR. MAGGARD:
- 9 I guess, John, I'll let you start.
- 10 EXAMINATION
- 11 BY MR. SCOTT:
- 12 Q. You said that there was a --- you found out there
- was a problem with the frequencies and you all had
- went in prior to this event, in approximately ten
- days, and adjusted the --- changed frequencies. When
- 16 did you --- or do you remember when you found out
- 17 there was a problem?
- 18 A. I think it was approximately two to three weeks
- 19 prior to the accident, when we spent approximately a
- 20 week or so, you know, scratching our heads and
- 21 thinking of different things.
- 22 Q. That could be wrong?
- 23 A. Uh-huh (yes).
- Q. To your knowledge, does all of Massey's mines use
- 25 this same system pretty much? Is it company-wide, the

- 1 same system they had here at UBB or is it similar
- 2 or ---?
- A. All but two that I'm aware of. They do have a
- 4 recent acquisition of mines in Kentucky that I'm not
- 5 familiar with. I think they already had something
- 6 when they acquired them. And outside of that, the
- ones I am aware of, I think there's two that do not
- 8 use our system.
- 9 Q. Have you received any kind of request from the
- 10 company as far as data retrieval since the accident,
- any questions from the company?
- 12 A. No, not since the day that you and I met over at
- 13 UBB.
- 14 Q. Has any of Massey's attorneys contacted your
- 15 company with questions?
- 16 A. Not to my knowledge.
- 17 MR. SCOTT:
- 18 Thank you.
- 19 EXAMINATION
- 20 BY MS. SPENCE:
- Q. Do you think the system worked the way it was
- 22 supposed to have worked on April 5th?
- 23 A. Yes.
- 24 MS. SPENCE:
- 25 Thank you. That's all.

- 1 MR. MAGGARD:
- 2 I think we need to take a break.
- 3 OFF RECORD DISCUSSION
- 4 RE-EXAMINATION
- 5 BY MR. MAGGARD:
- 6 Q. Gary, what type of training have you guys --- your
- 7 guys that work for you provided for UBB on the system?
- 8 A. While we're installing, we always that if there
- 9 are any of the people at the mine that are going to be
- 10 working on the system accompanying us and work with
- 11 us. So it's a hands-on training during the
- installation phase. When we feel comfortable that
- they know how to install the devices, then we leave
- for a while, while they finish the install to save
- them our labor charges, and then we come back and
- 16 verify what they've done. And then we work with a
- dispatcher on the dayshift and explain everything to
- them and give them a training class or a training
- 19 session, I guess, on how to actually look at the
- readers and see where people are.
- Q. In your opinion, from feedback from your guys, do
- 22 you feel that the dispatchers were knowledgeable or
- 23 they needed additional training at UBB as far as the
- 24 tracking system goes?
- 25 A. They knew how to look at the screen and see where

- 1 people were, but the reporting functions were not
- 2 fully implemented at that point, and that was one of
- 3 the reasons why we sent --- or our guys went to the
- 4 mine that night to help them print out the reports.
- 5 Q. So had all of the dispatchers at some point went
- 6 through some kind of training class with you guys?
- 7 A. Not all shifts, just the dayshift person. And I
- 8 believe we probably would have talked to the evening
- 9 shift, but I would have to confirm that with Dave or
- 10 Wes.
- 11 Q. Do you all keep a record of people that you train
- when you're at the mines?
- 13 A. No, we do not.
- Q. Is there anything that --- any kind of information
- 15 that your guys have mentioned about the mine that
- indicated that they were worried about conditions at
- 17 the mine?
- 18 A. No. Actually, UBB was one of the ones we always
- 19 looked forward to working in. It always felt like a
- 20 safe environment.
- 21 ATTORNEY BAXTER:
- 22 On behalf of MSHA and the Office of
- 23 Miners' Health, Safety and Training, I want to thank
- 24 you for appearing and answering questions today. Your
- cooperation is very important to the investigation as

1	we work to determine the cause of the accident. We	
2	request that you not discuss your testimony with any	
3	person aside from your personal representative. Aft	er
4	questioning other witnesses, we may call you if we	
5	have any follow-up questions. If at any time you ha	ve
6	additional information regarding the accident that y	ou
7	would like to provide to us, please contact us at the	e
8	contact information that was previously provided to	
9	you.	
10	If you wish, you may now go back over any	
11	answer you've given during this interview. You may	
12	also make any statement that you'd like to make at	
13	this time. Again, I want to thank you for your	
14	cooperation in this matter.	
15	A. Thank you.	
16	* * * * * *	
17	STATEMENT UNDER OATH CONCLUDED AT 11:07 A.M.	
18	* * * * * *	
19		
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