UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

MERRIMACK VALLEY RESIDENTIAL GAS *

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Interview of: DAVID RHOADS

Monday, September 17, 2018

APPEARANCES:

ROGER EVANS, Investigator in Charge National Transportation Safety Board

JAMES SOUTHWORTH, Investigator National Transportation Safety Board

DARREN LEMMERMAN, Investigator
Pipeline and Hazardous Materials Safety Administration
(PHMSA)

RICHARD WALLACE, Director, Pipeline Safety Division Massachusetts Department of Public Utilities,

TOM TOBIN, Esq.
Wilson Elser Law Firm
(On behalf of Mr. Rhoads)

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INTERVIEW

(2:35 p.m.)

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MR. EVANS: Good afternoon. Today is September 17th, it is now 2:35 p.m. My name is Roger Evans. I'm the investigator in charge for this accident for the National Transportation Safety Board. The interview is being conducted as part of the investigations in multiple resident gas explosion event that occurred in Lawrence, Massachusetts, Andover/Lawrence, on September 13, 2018. The case number for the NTSB is PLD18MR003.

This interview is being recorded and may be transcribed at a later date. A copy of the transcript will be provided to the interviewee for review prior to being entered into the public docket.

Mr. Rhoads, you are permitted to have one other person present during the interview. This is a person of your choice, supervisor, friend, family member, or nobody at all. Please state for the record the spelling of your name and who you have chosen to be present during this interview.

MR. RHOADS: My name is David Rhoads. It's D-A-V-I-D, Rhoads is R-H-O-A-D-S. And the person to be here with me is Tom Tobin.

MR. EVANS: Okay, Tom, can you introduce yourself, please?

MR. TOBIN: Yes. My name is Tom Tobin, and I'm a partner at the law firm of Wilson Elser.

MR. EVANS: Okay, thank you. I'd like to go around the room now, and have everyone in the room introduce themselves with name,

- 1 | affiliation, and job title.
- MR. WALLACE: Richard, R-I-C-H-A-R-D, Wallace, W-A-L-L-A-C-E.
- 3 | I'm the Director the Pipeline Safety Division for the Department
- 4 of Public Utilities in Massachusetts.
- 5 MR. LEMMERMAN: Darren, D-A-R-R-E-N, Lemmerman, L-E-M-M-E-R-
- 6 M-A-N, PHMSA, Accident Investigation Division.
- 7 MR. SOUTHWORTH: Jim Southworth, S-O-U-T-H-W-O-R-T-H. I'm an
- 8 | accident investigator with the Rail, Pipeline and Hazardous
- 9 Materials, with National Transportation Safety Board,
- 10 Washington, D.C.
- 11 INTERVIEW OF DAVID RHOADS
- 12 BY MR. EVANS:
- 13 Q. Okay, thank you. And thank you for agreeing to talk with us
- 14 today. I appreciate that. Before we get into asking you
- 15 questions, we would like to just get some information on your
- 16 background and how long you've been with this firm.
- 17 A. I've been with them about 5 years now.
- 18 Q. Okay.
- 19 A. I'm a senior controller so that means that I hold all three
- 20 | areas of operation in our company.
- 21 Q. Okay. And prior to this assignment, this position at this
- 22 company, what -- where did you work before?
- 23 A. I worked for a company called EMC, which is a data storage
- 24 | information technology company, actually located here in Boston.
- 25 And I spent about 5 years there as a storage technologies

- 1 technician.
- 2 Q. Okay. And before that?
- 3 A. Before that, I've got about 20 years in the copier and office
- 4 | equipment industry working as a technician for them.
- 5 Q. Okay. Okay, so let's talk about your training that you've
- 6 had in SCADA.
- 7 A. Okay. Prior to my getting certified for my first AOR, I was
- 8 trained for a year.
- 9 Q. If you use any sort of acronyms, can you spell, can you tell
- 10 us what those are?
- 11 A. Area of Operation.
- 12 Q. Okay.
- 13 A. I spent a year under supervision learning the system in that
- 14 particular area of operation before I was certified in it. And
- 15 then spent another year in the next level in our company's
- 16 hierarchy of areas of operation learning that area in SCADA, and
- 17 | learning the particulars of how that area operated. And then
- 18 | after that, after I was certified in that I spent another year
- 19 | learning the Massachusetts area of operation and then was
- 20 | certified in that area.
- 21 Q. Okay. Is there a retraining cycle for you guys within your
- 22 | current organization?
- 23 A. We get recertified once a year in each of the AORs, areas of
- 24 operation, so we have to go through the testing all over again
- 25 once a year every year.

- 1 Q. Okay.
- 2 A. And then we're constantly learning as our system grows and
- 3 changes, we are constantly training all the time, so.
- 4 Q. And the training, is it computer-based with simulators?
- 5 A. We do some computer-based training then we also do some pen
- 6 | and paper and chalkboard kind of simulations, too.
- 7 Q. And do you write a test?
- 8 A. I'm sorry?
- 9 Q. Do you have to write a test? Are you tested --
- 10 A. On the CBT stuff we are, yes.
- 11 Q. Okay. How about the classroom stuff?
- 12 A. The classroom stuff is more what we do, mock emergencies
- 13 amongst the whole department just to make sure we can handle
- 14 ourselves when these types of situations occur.
- 15 Q. Okay. In your 5 years, how many emergencies have you
- 16 addressed? Do you have any idea?
- 17 A. Mock or in the field?
- 18 O. In the field.
- 19 A. In the field, I've probably had two or three of them that
- 20 I've had to address. Most of those have been not near as
- 21 | significant as this one.
- 22 Q. Right, okay. So, how many consoles do you have in
- 23 (indiscernible)?
- 24 A. In gas control, we have six consoles.
- 25 Q. And your shift is what?

- 1 A. We do a rotating shift. Our typical shifts run on a 2-week
- 2 cycle working Monday and Tuesday, off Wednesday and Thursday, then
- 3 on Friday, Saturday, Sunday, and then the next week you would be
- 4 off Monday and Tuesday, work Wednesday/Thursday, and then off the
- 5 Friday, Saturday, Sunday.
- 6 Q. Okay. And your shift is how many hours?
- 7 A. Twelve hour shifts.
- 8 Q. Twelve hour shifts, okay.
- 9 A. And then we, the people that are learning the different areas
- 10 | will rotate between days and nights as they do their different
- 11 | cycles. So like the first 2 days that you're on the Monday and
- 12 Friday, it might start out as a day shift and then the next
- 13 Friday, Saturday, Sunday would be a night shift. And then the
- 14 next following Wednesday and Thursday would be a day shift, and it
- 15 | would cycle through that way as well.
- 16 Q. Okay. What type of leak detection software do you have on
- 17 | the system, proprietary or is it, is a --
- 18 A. I couldn't tell you that. I know that we monitor the
- 19 pressures and flows at a lot of points but it depends on the
- 20 | individual points.
- 21 Q. Okay. Do you have leak detection analysts that are outside
- 22 | your controller world that would assist you if would run into a
- 23 problem.
- 24 A. I couldn't tell you that.
- 25 Q. I mean, if you have a big problem do, could you, is there

- 1 | someone in the, in the world of SCADA that you would talk to and
- 2 | say, hey, I need help, I'm getting indications I'm not familiar
- 3 | with or whatever, sort of like a shell answer man for your
- 4 business?
- 5 A. Well, usually we're going to consult amongst each other, the
- 6 other people that are on shift at the same time and with our shift
- 7 | lead, if we're seeing something in the display that we may not be
- 8 familiar with or may not understand.
- 9 Q. Okay. So, the way your SCADA system is arranged, and I know
- 10 this company is a five-state-wide kind of company, how does that
- 11 | range in the world of SCADA?
- 12 A. Well, it's ranged into the three areas of operation.
- 13 Q. Okay.
- 14 A. So, that kind of that the AORs are. We start out with one
- 15 group that covers Ohio and Kentucky, and then another group that
- 16 covers Pennsylvania, Maryland, and Virginia. And then the next
- 17 AOR areas of operation would cover Massachusetts.
- 18 Q. Okay. And are most every, is -- are most of the controllers
- 19 | cross-trained for any area?
- 20 A. A large majority of us are but we still have some people that
- 21 | are coming up to be trained in the third AOR, your time in house
- 22 and experience mandate when you move on to the next levels.
- 23 Q. Okay. So, just I know for the record, Area of Operation 1
- 24 | would be which states?
- 25 A. Ohio and Kentucky.

- 1 Q. AOR 1. Maryland and Virginia is 2?
- 2 A. Maryland, Virginia, and Pennsylvania is number, is what we
- 3 | call the East Area.
- 4 Q. And that's number 2?
- 5 A. That would be number 2.
- 6 Q. Okay. And the Mass is number 3.
- 7 A. Number 3.
- 8 Q. Okay. And for AOR 3, how many controllers are trained in
- 9 AOR 3 -- or excuse me, what is the total count of controllers you
- 10 have in the firm?
- 11 A. I would say, let's see --
- 12 Q. Just roughly.
- 13 | A. About 20, 22 maybe.
- 14 Q. Okay. That's what I've seen a rough number. And a good bit
- of these, just to make it easy for us, a good bit of these
- 16 controllers are kind of ambidextrous in the --
- 17 A. Yeah.
- 18 Q. -- world of controlling?
- 19 A. Yeah, I'd say a good bit of them are.
- 20 Q. Okay. The newbies are the ones that are just to one area
- 21 | perhaps?
- 22 A. Correct.
- 23 Q. Okay. So, when you have your training to the years, have you
- 24 | actually used problems that you've had in the past where you know,
- 25 | you were telling me earlier that you experienced some problems --

- 1 do those become training exercises or have they --
- 2 A. They do in some cases, yes.
- 3 Q. Okay. So, they have done that?
- 4 A. Yes.
- 5 Q. Okay. Okay, so on, the person that was on the system at the
- 6 time of the event, was that you?
- 7 A. Yes.
- 8 Q. Okay. I want to make sure of that. So, how far into your
- 9 shift were you when this occurred?
- 10 A. When I saw my alarms I was towards the end of my shift.
- 11 Q. Okay. And so on that day you came in, you came in at what
- 12 | time?
- 13 A. I came in about a quarter to 6, 5:30, 6:00 a.m. and this
- 14 | would have been a morning start for me that day.
- 15 Q. So 5:30 or so, plus or minus a.m.
- 16 A. Correct.
- 17 Q. And your schedule was to work until, what, 5 --
- 18 A. About 5:30 or 6:00. We've got it on the -- our schedule runs
- 19 6:00 to 6:00 but we show up early so we can do a handoff and --
- 20 Q. Okay.
- 21 A. -- so that's why we're always there ahead our start of our
- 22 | schedule.
- 23 Q. Okay. So you were nearly at the end of your shift when this
- 24 | whole thing happened?
- 25 A. Um-hmm.

- 1 Q. Okay. So, just to like cover some of the basics, though, the
- 2 | handoff that you do for your SCADA operation, how many minute
- 3 | handoff do you have? Is it a half hour, 20 minutes, 10 minutes?
- 4 A. As long as is needed to handoff whatever has been going on
- 5 | that day.
- 6 Q. Okay. So, they don't set a time limit to it?
- 7 A. No, no.
- 8 Q. Could they be as short as 10 minutes?
- 9 A. Depending upon what's happened that day and what you have to
- 10 pass forward.
- 11 Q. But management doesn't set a time limit for you?
- 12 A. No.
- 13 Q. Do you have, do you also have something like logs that you
- 14 keep that the person coming on board can look at what you've been
- 15 doing for the day and --
- 16 A. Yes. We fill out a shift turnover which --
- 17 Q. Okay.
- 18 A. -- each of our areas within the area of operation that you're
- 19 working, each of the markets, as we call them, you've got a line
- 20 there that you can fill out anything that you've seen going on in
- 21 | those areas or anything that you feel is pertinent to call right
- 22 | out at attention for the next controller.
- 23 Q. Okay. So, how many months in a row had you worked in this
- 24 Massachusetts area?
- 25 A. It varies.

- 1 Q. Or years. Have you worked, I mean have you worked this
- 2 | region for years in a row?
- 3 A. I've worked this region for almost 3 years now.
- 4 \mathbb{Q} . Without going to the other regions on a regular basis?
- 5 | A. No. We all rotate in and out depending upon who's on shift
- 6 and their level of training and we try and rotate out to keep
- 7 everybody fresh.
- 8 Q. Okay. So, from the -- I'm just trying to figure out many
- 9 months consecutively that you worked in the Massachusetts region
- 10 | up to the point of this accident.
- 11 A. I can't give you a definite number. As far as consecutive
- 12 days I would --
- 13 Q. No, I meant is it 6 months, is it a year, is it 2 years, or
- 14 | is it 3 months or --
- 15 A. I've been working at least 3 years. I've been controlling in
- 16 the Massachusetts market.
- 17 Q. For 3 years.
- 18 A. Yes.
- 19 Q. Without absences every once in a while.
- 20 A. Correct.
- 21 Q. Okay. That's what I was trying to get at. Okay, thanks.
- 22 And the other person that's on this system, your shift reliever
- 23 | guy --
- 24 A. Kevin.
- 25 Q. Kevin, okay. Has Kevin been on this system as well for that

- 1 | length of time?
- 2 A. Longer. I couldn't tell you how long though.
- 3 Q. Okay. But at least, he's at least same amount of time as
- 4 you?
- 5 A. Yeah.
- 6 Q. Okay. So, is Kevin normally your side kick for this, for
- 7 | your assignment now. I mean, you're off, Kevin's on, Kevin's off,
- 8 you're on.
- 9 A. Well we, because of the way the shift cycle works, we work in
- 10 two different pairs of teams. And Kevin and I are actually on the
- 11 same team but he was working nights that night and I was working
- 12 days.
- 13 Q. Oh okay, okay. Okay, good. I understand. So, in the entire
- 14 | time that you can recall for this, for this area, not the AOR, I'm
- 15 talking about --
- 16 A. The Lawrence market.
- 17 Q. The Lawrence market. When was the last time you had an
- 18 issue?
- 19 A. Longer than I can recall.
- 20 Q. Really.
- 21 A. As far as any major issues go, I mean --
- 22 Q. Okay. So, nothing that's significant for the last 3 years or
- 23 so?
- 24 A. Not that I can recall.
- 25 Q. Yeah. I mean that's not unusual that's just, we wanted to

- 1 know for the record that --
- 2 A. No.
- 3 Q. So, let's just say it this way, what becomes a recordable
- 4 | incident in your world? When do you have to say, this becomes an
- 5 | item that management needs to know about?
- 6 A. Well, obviously any high-high is going to be an incident we
- 7 | want management to know about. Any safety-related incident we
- 8 want management to know about as far as that goes, you know.
- 9 Q. Okay. So, can we say then that for those 3 years no
- 10 high-highs prior to this?
- 11 A. No.
- 12 Q. We can't say that?
- 13 A. No.
- 14 Q. There were high-highs.
- 15 A. You can get high-highs in a market that don't necessarily,
- 16 like if you have somebody doing work at a station and they've got
- 17 | that station bypassed --
- 18 Q. Let me reword that. Do you have any high-highs that were
- 19 | outside of expected high-highs? You know, you would normally
- 20 expect the range about -- when something, their doing something on
- 21 | the line, right?
- 22 | A. Right. Not that I'm aware of.
- 23 Q. Okay. I mean that would be a 3-year period?
- 24 A. Near as I can tell, yeah.
- 25 Q. Okay. That's excellent. So, were there any things of

- 1 | significance that, you know, any anomalies that you saw in recent
- 2 days, up to this incident that you thought, well that's weird, I
- 3 haven't seen that before?
- 4 A. No, there were not.
- 5 Q. Okay. And were there any reported in the log when you had
- 6 | the turnover log?
- 7 A. Not to me, no.
- 8 Q. Okay. Okay, so I kind of got the stuff out of the way
- 9 that I needed, a way to exclude things, okay? Ask these other
- 10 questions and you get a lot of things excluded, like previous
- 11 incidents and stuff like that. So, now to the meat of the matter,
- 12 | this case.
- So, when you get a high-high, is -- do you, do you look at
- 14 that from the standpoint of the time it takes to go from a normal
- 15 to a high to a high-high, that timeframe, that -- is that part of
- 16 your -- if you go from like a high to a high-high over 10 minutes
- 17 | versus one that happens in 45 seconds, do you report those types
- 18 of numbers to your management?
- 19 A. Anytime we get a high-high we report it.
- 20 Q. But it doesn't matter with regard to the how you got there?
- 21 A. How we got there, it doesn't matter.
- 22 Q. Okay, okay, I did want to know that. So, when you get a
- 23 | high-high, I want you, as much detail as you can possibly give us,
- 24 | what do you do?
- 25 A. Well the first thing I'm going to do is evaluate how fast did

- 1 this happen. Okay, so in the case of this when it happened
- 2 | instantly followed by another one at a station nearby instantly.
- 3 So, that told me something was off in that market right then and
- 4 there.
- 5 So, the next step for me was to call the field since I didn't
- 6 have any control over either of those stations, and get the local
- 7 | quy who's most familiar with that particular area who was on call
- 8 or assigned to that area, get them notified of it so they can get
- 9 on their way to evaluating what's going on.
- 10 Q. Okay. Just so I'm, again, let me make this clear for the
- 11 | record. When you say, I have no control, and I understand if you
- 12 have, you know, like if we talk about this in like, in compared to
- 13 | electricity, you know, we can, control could be at a breaker box
- 14 somewhere on this or it could be at the utility company, right?
- 15 A. Correct.
- 16 Q. The electric company. So, you don't have, you have the big
- 17 switch to shut the whole thing down, like at the electric company
- 18 | but you don't have the fuse box for those legs where you saw the
- 19 high-high coming.
- 20 A. Doesn't really equate to the same sort of thing. I had,
- 21 those two points that we saw the high-high at are strictly points
- 22 that we monitor the pressure at those points. I have other points
- 23 | in that market where I have controls of regulation that I can
- 24 change the pressures in -- feeding into the market itself but
- 25 | that's for a larger geographic area. And that particular site, I

- 1 had no ability to change the regulation there.
- 2 Q. Okay, I see. So, when you call the field, explain field.
- 3 A. That would be our local M and R technician, meter and
- 4 | regulation -- measurement and regulation, I'm sorry.
- 5 Q. But is that, is that somewhat of a situation like, you know,
- 6 this is like a fire alarm code red or blah, blah, some sort
- 7 | of a emergency situation? Are you looking at it, are you calling
- 8 him to just get more information or let him know there's
- 9 something, there's an anomaly of sorts, I want you to take a look
- 10 | at it?
- 11 A. Letting him know that, hey, there's something unusual going
- 12 on here. We notify the field on every high-high as well. So,
- 13 | we're not going to, we're going to make a call out to whoever is
- 14 | in charge of that particular station or whoever's the meter and,
- 15 measurement and regulation guy for that station whenever we see a
- 16 high-high.
- 17 Q. Okay. So, let's use your drawing here. This is called the
- 18 Lawrence market.
- 19 A. Correct.
- 20 Q. Lawrence schematic. It's a gray drawing with a blue line
- 21 | running across it I quess for a river. And it has two red numbers
- 22 on it. And those are the areas where the high-highs were picked
- 23 up?
- 24 A. That is correct.
- 25 Q. Okay. Now, if one were to look at this and say, you know, in

- 1 the gas, in the petroleum pipeline business they can just say,
- 2 | well I'm going to, I'm going to shut the line down. But in your
- 3 | business, you're not shutting the line down, right?
- 4 A. Right.
- 5 Q. It's going to hit too many customers and that's not part of
- 6 you --
- 7 A. Right, correct.
- 8 Q. -- your makeup, right?
- 9 A. Correct. That's going to be -- I don't see everything in
- 10 this drawing that I could be affecting, so I can't just
- 11 | arbitrarily close off a station because I could be running a
- 12 | hospital out of gas or --
- 13 Q. Right.
- 14 A. -- who knows what else.
- 15 Q. Yeah. Yeah, I mean, I just want to get, we have to explain
- 16 this to the laymen in reports later on and whatever kind of
- 17 | information you can give like, that's perfect right there to --
- 18 some people say, why didn't they just close the line down. And
- 19 that's, I know the answers to that but I want it on the record as
- 20 why, so, okay. So, once this was called in, and -- do you get
- 21 | feedback from the field guy fairly guickly?
- 22 A. It depends on the individual situation. In this case, I did.
- 23 He called me back probably 10 minutes or so later on to let me
- 24 know he was almost at the, his location where his equipment truck
- 25 was and that he'd seen some police and fire go by and he wanted to

- 1 know what the situation I was seeing, if it had changed.
- 2 Q. Right, okay. So, whenever, per procedure, and I guess you
- 3 have, I mean I know you have a SCADA offering book that shows how
- 4 to respond to an alarm and what you're supposed to do and all
- 5 that, right? You have a decision tree or something?
- 6 A. We've got a, we've got documented procedures that we keep
- 7 | online so that whenever they get changed we've got access to the
- 8 current documented procedures.
- 9 Q. Right, okay. So, what does your procedure say with regard
- 10 to, if you get a high-high, I know they might say, notify field
- 11 | immediately. But does it say a timeframe?
- 12 A. We want to have action taken, whether it's notifying the
- 13 | field or my doing something where I can control in a system to
- 14 alleviate that high-high within 10 minutes.
- 15 Q. Okay. So, that's your rule, 10 minutes?
- 16 A. Yeah.
- 17 Q. Okay. And on the day of this event, do you know the timing
- 18 | that it was?
- 19 A. I know from my logs that the first alarm that I saw was about
- 20 4:04.
- 21 | O. Um-hmm.
- 22 A. The second high-high alarm was at 4:05. And by 4:06 I was on
- 23 the phone to the local meter and regulation technician.
- 24 \mathbb{Q} . Okay, 4:05 was the high-high --
- 25 A. 4:04, 4:05 was the second one.

- 1 Q. Okay. So, two high-highs.
- 2 A. Two high-highs at the two stations you can see there.
- 3 \mathbb{Q} . Right. And the call made at 4:06.
- 4 A. Correct.
- 5 Q. Okay, great. So, when you would make your call, did you make
- 6 any adjustments back, I mean, I guess, well you can't control this
- 7 | can you?
- 8 A. I can't control that point.
- 9 Q. You're kind of like at a loss --
- 10 A. Um-hmm.
- 11 Q. -- at this point because all you're doing is notifying the
- 12 guy in the field and that's it.
- 13 A. Um-hmm.
- 14 Q. Okay. So, when you had this issue and you had, you know, a
- 15 | big problem like this, did you later make any control movements
- 16 for the rest of the neighborhood or anything?
- 17 A. There were no control movements that I could make for that
- 18 situation.
- 19 Q. For this whole area all you have is monitoring?
- 20 A. Not for the entire market but there are no controls,
- 21 movements that I could have made that would have had --
- 22 Q. Would have helped that out.
- 23 A. -- would have helped that out.
- 24 Q. Okay.
- MR. TOBIN: Roger, just clarification, that's to the low

- pressure system.
- 2 MR. RHOADS: Right.
- 3 MR. EVANS: Right.
- 4 MR. TOBIN: If you were to ask about the high pressure
- 5 system --

- 6 MR. EVANS: Yeah.
- 7 MR. TOBIN: -- you may get some different answers.
- 8 MR. EVANS: Right.
- 9 MR. RHOADS: Yeah.
- 10 BY MR. EVANS:
- 11 Q. Okay, okay. The call you got back from the local guy, how --
- 12 can you describe what was said during that call?
- 13 A. Pretty much he wanted to know, wanted me to know that he had
- 14 | almost reached his truck. That he heard or seen some emergency
- 15 equipment go by and wanted to know what the state of the stations
- 16 were, had I seen any changes, were they still on a high-high.
- 17 Q. Um-hmm.
- 18 A. And I informed him that they were and he says, well he's
- 19 almost to his truck, he should be getting there soon, so.
- 20 MR. EVANS: Okay. So, that's all I have for right now.
- 21 BY MR. WALLACE:
- 22 Q. Richard Wallace speaking. You said you came on shift at 5:30
- 23 | in the morning and you were going off shift at 5:30 in the
- 24 evening, making the changeover to the next person coming on.
- 25 A. Um-hmm.

- 1 Q. Do you take any breaks during that day?
- 2 A. Yes. We take several breaks during the day.
- 3 Q. Are they scheduled a particular distance apart or is it when
- 4 you feel you need to take a break?
- 5 A. Usually when we feel we need to take a break. We try and
- 6 take several, it just really depends on what all is going on.
- 7 \mathbb{Q} . Okay. Is -- are you the only one in the control room?
- 8 A. No.
- 9 Q. How many other individuals are in the control room?
- 10 A. It varies per shift and vacations and stuff like that but
- 11 minimum of three.
- 12 Q. Minimum of three, okay. I know you talked about a log book
- 13 when you change shift and when you turn the log book over to the
- 14 other person.
- 15 A. It's an electronic file, yes.
- 16 Q. It's an electronic file. Do you have any conversations about
- 17 | it --
- 18 A. Yes. Usually we review everything that we've seen or done
- 19 during the day, we review what's on the shift turnover, and then I
- 20 sign off on it that this is my shift turnover and I've talked with
- 21 them about everything that has been going on, and then they, when
- 22 they start their shift they have to sign off on that review as
- 23 | well.
- 24 Q. Okay. You mentioned that you had been in the Massachusetts
- 25 market for 3 years?

- 1 A. Um-hmm.
- 2 Q. But you had 5 years of experience, I'm assuming yeah you've
- 3 spent other time in other markets.
- 4 A. Correct.
- 5 Q. Are their control rooms, their monitors similar or do they
- 6 | vary from market to market?
- 7 A. It's the same control room.
- 8 Q. It's the same equipment, same --
- 9 A. Same equipment.
- 10 Q. -- set up.
- 11 A. Same set up.
- 12 Q. So it's identical.
- 13 A. Yes.
- 14 Q. Okay. To the high-high issue, do you get audible and visual
- 15 alarms or just one or the other?
- 16 A. We get visual alarms.
- 17 Q. Did you not get audible?
- 18 A. No.
- 19 Q. Do you have the ability to silence the alarm?
- 20 A. There is no audible component to it.
- 21 Q. Well, it's a visual.
- 22 A. It's a visual.
- 23 Q. Then --
- 24 A. That's --
- 25 Q. -- turning that off or silence, you can silence a visual and

- 1 you can silence an audible.
- 2 A. I do have the ability to silence that alarm by responding to
- 3 | it and so I'll click on the alarm and acknowledge it.
- 4 \mathbb{Q} . Do you have the ability to change the sets, set points?
- 5 A. As far as --
- 6 |Q. High-high, low-lows.
- 7 A. Yes, I do.
- 8 Q. Do you need to run that by a supervisor? Is there any
- 9 process in place that you would have to take?
- 10 A. Engineering has to approve any of those changes.
- 11 Q. But you physically have the ability to change the high-high,
- 12 | the low-low?
- 13 A. Yes.
- 14 Q. How would you go through that? I'm trying to make a
- determination of if it could happen accidently.
- 16 A. No. It wouldn't -- nobody's going to change those limits
- 17 | because it's very ingrained in our safety culture that you can't
- 18 change that without a sign off and it's documented when you do
- 19 | change it.
- 20 Q. I guess, I guess you're missing my point.
- 21 A. You're not going to accidently change that limit.
- 22 Q. What preventive measures are in place to stop that from
- 23 | happening?
- 24 A. You have to go through a series of screens to get to that
- 25 point so it's not something you're accidently going to stumble

- 1 across in a mouse click or two.
- 2 Q. Okay, thank you. On the night of the incident, there -- it's
- 3 my understanding that there are 14 district regulator stations
- 4 that feed that system, two of which do not send back a
- 5 | telemetering to the control center. The other 12 are set at 1 PSI
- 6 and then there are two others in the system that are also set at
- 7 | 6 PSI. Where is the high-high on the ones that are set at 1 PSI?
- 8 A. I wouldn't be able to tell you.
- 9 Q. Does, you don't see a numerical value on the screen, it
- 10 | just --
- 11 A. I'm not sure which stations you're talking about. I see two
- 12 stations in that area where the issue occurred.
- 13 Q. Only two stations you can --
- 14 A. Only two stations.
- 15 Q. -- you can view.
- 16 A. Yes.
- 17 \mathbb{Q} . What about the other 12?
- 18 A. I don't believe I see those.
- 19 Q. You don't see those at all?
- 20 A. I don't believe so.
- 21 Q. Does anybody else see those?
- 22 A. I wouldn't be able to answer that.
- 23 Q. For the two transducers that are out in the system, do you
- 24 see those transducers that are set for 6 PSI?
- 25 A. I do.

- 1 Q. You do, okay.
- 2 A. Well, I see the stations South Lawrence and Riverina, and I'm
- 3 assuming those are the two that you're talking about.
- 4 Q. I'm just finding out that --
- 5 A. Okay.
- 6 Q. I'm talking about all the stations. It's my understanding
- 7 | that they're all transduced back to, other than them two stations
- 8 that do not have telemetering, they are all transmitted back to
- 9 the control room. But I just want to be clear here that you're
- 10 telling me that you only see two stations of the 14?
- 11 A. That's something I can't answer. I'm not sure I understand
- 12 your question.
- MR. EVANS: This is Roger Evans. I just want to, I'm just
- 14 curious if your -- it may be that they use those two points as
- 15 like to monitor off working --
- MR. WALLACE: That's not what I was told. And that's what
- 17 I'm just trying to clarify.
- 18 MR. EVANS: Oh okay, okay.
- MR. WALLACE: Yeah, I'm just trying to clarify here so that
- 20 | we can do some, you know, take steps to prevent this from
- 21 happening again.
- 22 MR. TOBIN: I think Adam, who's going to be here next, is a
- 23 manager and he has a much broader understanding of which two
- 24 points they're monitoring, just from my having talked to him.
- MR. WALLACE: Okay.

- 1 MR. RHOADS: Yeah, he may be better equipped to answer that
- 2 question for you.
- 3 MR. WALLACE: Okay. All right, thank you then.
- 4 BY MR. LEMMERMAN:
- 5 Q. Darren Lemmerman. I think I just have a one quick question
- 6 | here. But what time was your change turnover?
- 7 A. My change turnover took place, it was a long one obviously
- 8 this day, so somewhere between 5:30 and probably 10 till 6:00.
- 9 Q. Around 5:30 to 5:50?
- 10 A. Yeah, roughly.
- 11 Q. So, you actually did a changeover in the middle of an event,
- 12 | is that right?
- 13 A. Correct.
- 14 MR. LEMMERMAN: That's the only question I have.
- 15 BY MR. EVANS:
- 16 Q. I don't know this for sure, this is Roger Evans, the range
- 17 | that you have for the set point, it looks like it goes from -- I
- 18 can't read this, it looks like to goes from -5 to 40 inches. And
- 19 it started alarming at like 36 perhaps. So, from your standpoint,
- 20 | the -- is that, is that correct?
- 21 A. The range of that particular transducer was about 5 to 14 and
- 22 | it alarmed in at 15.02 inches of water column to me. And the
- 23 other transducer's range was 7 to 14 and it alarmed in at 16.94,
- 24 is when it triggered the alarm.
- 25 Q. Okay.

- 1 A. And that would be found on my log sheet here.
- 2 Q. Okay. Since this occurred, have there been any changes in
- 3 | your work?
- 4 A. Since this occurred, I haven't been back to work yet.
- 5 Q. Oh, you haven't?
- 6 A. No.
- 7 Q. Have you heard from any others that things have changed since
- 8 | this event or you haven't talked to anybody?
- 9 A. I haven't talked to anybody.
- 10 Q. Okay. (Indiscernible). So, the line, the line going to
- 11 let's say, pretty much zero pressure, I mean, I know this is very,
- 12 very small numbers down here -- the, it looks like it started
- 13 going down, I mean it started going down at what, somewhere around
- 14 7:28 and then by -- or 6:28, and then by 7:30 it's pretty well
- 15 leveled out. Is that, do you think, does that show indication of
- 16 where we were at with pressure as far --
- 17 A. I wouldn't be able to answer that as I had already left shift
- 18 at that point.
- 19 MR. EVANS: Oh, okay, okay. Darren, that's almost in,
- 20 | consistent with our 8:00 number.
- 21 MR. LEMMERMAN: It's consistent with the zero but if you look
- 22 | at the alarm, or the, your note log here, 913 at 6:21, think that
- 23 important time to be referenced here. It states that pressure
- 24 | alarm cleared to normal at Riverina at 16, or 18, 2100 hours.
- MR. RHOADS: I was not on shift at that, that's not my --

```
1
         MR. LEMMERMAN: Correct, I understand.
 2
         MR. RHOADS: -- my note so I can't address that.
 3
         MR. LEMMERMAN:
                         Yep, I just referenced to the log.
                                                             Who would
 4
    be, this log I'm looking at Richard.
                                          The type --
 5
         MR. RHOADS: Kevin Mayes is the guy you're talking about.
 6
         MR. LEMMERMAN:
                         Kevin Mayes --
 7
         MR. RHOADS: Yes, sir.
 8
         MR. EVANS: And if we look for the DONA (ph.) log, Kevin did
 9
    a summary on the total time of the high-high at 6:24 on the 14th,
10
    the next day.
11
                     That would have been --
         MR. RHOADS:
12
         MR. EVANS:
                     Mary --
13
         MR. RHOADS:
                     Mary Jo.
14
         MR. EVANS:
                     Jo took that note.
15
         MR. RHOADS: Yes.
16
                     So she calculated as over pressure occurred for 2
         MR. EVANS:
17
    hours and 16 minutes. Okay. I think that's all. Are you --
18
    anything for you?
         MR. SOUTHWORTH: I'm all set. Well, actually I do have one
19
20
    question.
21
         BY MR. SOUTHWORTH:
         After the change of shift, you were allowed to go home?
22
23
         After the change of shift, myself and my lead controller went
2.4
    for urinalysis and breathalyzer testing. We went to go get drug
```

25

tested.

```
1
         MR. SOUTHWORTH: Okay, thank you.
2
         BY MR. LEMMERMAN:
 3
         Okay, one question.
 4
    Α.
         Yeah.
 5
         Do you know when you'll be starting SCADA shift again?
 6
         At this point, I don't know if they're going to allow me to
 7
    go home when I get back from here or if tomorrow after I get back
8
    in I'll go on shift for a few hours. Chances are good, I'll
 9
    probably not start my next shift until Friday.
10
         Okay, thank you.
11
         Just because I would have normally been on shift this
12
    morning, so.
                     Okay. Well, that ends the interview.
13
14
    appreciate it. Thank you very much.
15
         MR. RHOADS: Hopefully it helped you.
16
          (Whereupon, the interview was concluded.)
17
18
19
20
21
22
23
2.4
25
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: MERRIMACK VALLEY RESIDENTIAL GAS

FIRES AND EXPLOSIONS SEPTEMBER 13, 2018

Interview of David Rhoads

ACCIDENT NUMBER: PLD18MR003

PLACE:

DATE: September 17, 2018

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

