UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *
*
MERRIMACK VALLEY RESIDENTIAL GAS *
FIRES AND EXPLOSIONS * Accident No.: PLD18MR003
SEPTEMBER 13, 2018 *
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Interview of: ADAM ROORDA
KEVIN EARL MAYES

Northern Essex Community College
Lawrence, Massachusetts

Friday,
September 14, 2018

APPEARANCES:

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National Transportation Safety Board

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(On behalf of Mr. Rhoads)

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I N T E R V I E W

(3:45 p.m.)

MR. EVANS: We're on the record with the interview of two employees that work for Columbia Gas or --

MR. ROORDA: NiSource.

MR. EVANS: NiSource, excuse me -- NiSource. The first is Adam Roorka? Rordak?

MR. ROORDA: Roorda.

MR. EVANS: And the second on is Kevin Earl Mayes.

MR. MAYES: Correct.

MR. EVANS: Okay, so just like, want to read his little piece here. The NTSB is a Fact-Finding agency that has no regulatory authority. We don't investigate criminal matters but are charged with finding the cause of transportation-related accidents and making recommendations to regulations, industry regulators, industry and other organizations to prevent similar accidents in the future.

So, we hope we have a national (indiscernible) out of this one, out of the -- that we don't ever see this happen again, hopefully. This interview will be recorded. If we choose to use the information in our report we will transcribe the recording and send you a copy for your review. And that's why we asked for this information.

There will be a short intro that I reach which is -- amounts to what's on this page. It's not very much at all. We will

probably bust through this thing in such a time, I don't think you're going to need to take a break or have your attorney jump out of the room for -- to talk to you. But normally, in this setting, your attorney rarely speaks. Okay?

MR. ROORDA: Okay.

MR. EVANS: So good afternoon, MR. Roorda and --

MR. MAYES: MR. Mayes.

MR. EVANS: -- MR. Mayes. Good afternoon. It is now 3:45 p.m. And my name is Roger Evans. I'm the investigator in charge of the National Transportation Safety Board accident that we're investigating that occurred on September 13th in South Lawrence-Andover Mass area.

We are now at the Essex Community College in Lawrence, Mass. The case number is the PLD18MR003. This interview is being recorded and may be transcribed to later date. A copy of transcript will be provided to the interviewee for review prior to being entered into the public docket.

So, since you're both working for the same company and you have same representation, you are both permitted to have one 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 who you have selected to be present during this interview, and please provide the spelling of your name. You can go first, please.

MR. ROORDA: It's Adam Roorda, R-o-o-r-d-a. I selected MR.

Tobin.

MR. MAYES: And I'm Kevin Mayes, M-a-y-e-s. And I've selected Tom Tobin.

MR. EVANS: Okay, and, MR. Tobin, please, give us your information, the spelling of your name and affiliation.

MR. TOBIN: My name is Tom Tobin, T-o-b-i-n, and I'm an attorney with the Wilson Elser law firm.

MR. EVANS: Okay, thank you. Now I'd like to go around the room and have each person in the room introduce themselves with job title and affiliation and --

MR. WALLACE: Richard, R-i-c-h-a-r-d, Wallace, W-a-l-l-a-c-e. I'm the director of the Pipeline Safety Division, the Department of Public Utilities in Massachusetts.

MR. LEMMERMAN: Darren, D-a-r-r-e-n; Lemmerman, L-e-m-m-e-r-m-a-n. PHMSA, Accident Investigation Division.

MR. SOUTHWORTH: I am Jim, J-i-m, Southworth, S-o-u-t-h-w-o-r-t-h. I'm an accident investigator the railroad pipeline and hazardous material division at the National Transportation Safety Board of Washington, D.C.

MR. EVANS: Okay, so I think it's going to be easiest, because we just interviewed the other controller, your colleague there and I think we're going to start with you --

MR. MAYES: Okay.

MR. EVANS: -- and get some information from you. There's some key information we're looking for. And then once that's

done, we'll go ahead and talk to you, Adam.

MR. ROORDA: Well said you. He said you. He said he's recording this.

MR. EVANS: Oh, yeah, Kevin Earl Mayes. Sorry, is who we're going to speak with first.

INTERVIEW OF KEVIN EARL MAYES

BY MR. EVANS:

Q. So, Kevin, give us some basic background about your -- how long you've been with the company, your education, that type of thing.

A. Certainly. I have been with the company for 19 years. I had a high school education. I've been a controller for nine years, and my title is a senior gas controller.

Q. Okay. And what system do you work on?

A. A --

Q. What schedule system? What is the name of the system you work on? I know there are three regions.

A. Yeah, so I work on both the east or all three, all -- the east, the north and the west.

Q. Okay, so you're trained in all of the areas, for all --

A. Yes.

Q. For all five states?

A. Senior controllers are trained in all three.

Q. Okay, so you can do all five states?

MR. ROORDA: Six states.

MR. EVANS: Six states, but three --
MR. ROORDA: Three AORs.
MR. EVANS: Three AORs, okay.
MR. ROORDA: Sorry.
BY MR. EVANS:
Q. And as far as your role in this accident, can you briefly tell us, on that day, what happened and all the good stuff?
A. Oh, certainly.
Q. Okay.
A. My role in it is, I came in for my shift. I work second shift, evening shift, which is 6:00 p.m. to 6:00 a.m. We generally -- we have to there a quarter till, so we can do a shift tie-in, which is where we share information with the incoming shift as to what's going on.

And when I came in I spoke to David. He explained the situation where we were at that point. And I took responsibility for that site at that point.
Q. Okay. What is your understanding with regard to when a high-high occurs system? Do you have -- are you supposed to stay around for the whole time, even until, you know, the things have been neutralized and --
A. Until the problem's resolved?
Q. Right.
A. No, there's no expectation that you would have to stay throughout an entire event. Depending on the situation, that

could extend hours, so.
Q. Okay. Okay, I just wanted to get that. You said that you come in 15 minutes early. Is there a timed requirement for your turnover?
A. Timed requirement?
Q. I mean, do you have to spend at least half-hour, 15 minutes, 20 minutes 10 minutes --
A. No.
Q. -- for your -- no?
A. No, it's at the discretion of the controllers.
Q. Okay. So --
A. It's intended to be thorough, but there's no prescribed time limit.
Q. Okay. So as far as your experience on this region, this AOR, as you call it, in the past three years had you ever had any sort of a high-high or a high outside of a expected high-high with -- and I know they're be working on a system and you get an erroneous high-high. Right?
A. Yes.
Q. You can.
A. Certainly. When they're working on the station.
Q. When you're working on the system, so outside of those, did you ever experience a high? Have you ever had that since -- in the previous three years?
A. In the previous three years, I'm certain that I have. I

can't say that I would be able to recall the exact details of when and where that would have occurred. We do see them occasionally.
Q. Okay. Have you had any that you reported to -- were you had to make a call and say, this -- let's call this one in. You know, I guess whenever you have a high-high, there must be some sort of a reporting method that you have where you say, this is an upset high-high, for sure, and I had to make a call.
A. All high-highs are treated as such, and we would call out on any that we receive.
Q. And how much time do you have -- how much time are you supposed to have before you make out -- make this call?
A. Well, we call immediately. Any time we receive those we -- may I? We're recalled, we're required to respond within 10 minutes.
Q. Ten minutes? Okay. And does that get logged?
A. Yes.
Q. Okay. And is that something like this document we're looking at right here? Do you have one
A. Yes, that's correct.
Q. Okay. And that's not a document that -- and the document we're looking at is called what? What is that document called?
A. This would be a SCADA note.
Q. SCADA note? Okay.
A. SCADA Lotus note.
Q. Activity report, okay. So this is an official document that

would be required when one has a high-high --
A. You have the --
Q. -- in the system, right?
A. Yes, sir.
Q. And this is the 10-minute. This conversation's supposed to take place 10 minutes within the time you have a high-high?
A. We have to respond within 10 minutes, so --
Q. Okay.
A. Yes.
Q. Okay. Once that high-high -- and I know David Rhoads told us that he had a high-high and that he responded. Now when you came on shift, what discussions did you have with anyone out on the -- in this state, with regard to that situation?
A. Actually, at that time, I didn't speak to anyone in the field immediately there -- I mean, on arriving. I received the tie-in from David. The contacts had been made. At that point, my role was more of a monitoring and support role since I don't -- I don't have any control at that station right from the SCADA.

So, at that point, I was monitoring and supporting. And when we -- an event, a further event would happen, which did happen, I would contact the field again if there was any additional situations, changes in status.
Q. But in this particular case, there were no other issues.
A. We had a low pressure.
Q. Oh, that was -- oh, I saw that, yeah.

A. Yeah.
Q. So, you reported a low-low.
A. That's correct. I called and spoke to an M&R technician to advise him that that had happened.
Q. Okay, and what was his response to that?
A. He had expected it. He said he would make sure that everyone was aware of it -- his manager.
Q. Okay.
A. But because of the situation, it was an event that he was expecting.
Q. Okay. How often do you have training in this environment?
A. Oh, often. It's pretty much ongoing, so --
Q. Is certification required?
A. Yes.
Q. And --
A. Certify annually.
Q. Okay. How many controls do you?
A. I believe we have 20.
Q. Okay. When you're looking at these alarms, are you studying the amount of time it took for the alarm to go from one point to the next point?
A. Yes, sir.
Q. Is that a -- can you explain that for us a little bit, as far as, you know, the time between a high to a high-high and how you would treat that?

A. Oh, certainly. Usually, in most instances, we would receive a high before a high-high. That was not the case in this instance. We would -- and a high is it considered an alert. And that's to let us know that something is happening, could be approaching high-high.

We would analyze the trending in SCADA, looking at the data that we have to try to establish what the possible issue could be and also gathering information to be able to share it with M&R tech should it require a call-out.

Q. Okay. Is there, what do you call it -- proprietary leak detection software embedded within your SCADA system?

A. Leak protection software? I can't answer that question, sir.

Q. Okay. I was just curious.

MR. EVANS: I think it's all I have for right now.

MR. WALLACE: Okay, Richard Wallace speaking.

BY MR. WALLACE:

Q. When we had interviewed David earlier, we were talking about the ability to change high-high on the system. And my question to him was does he have the ability to do so? And he said, yes, he does. And my question is what is the process if that individual, any of the controllers, control technicians have the ability to change high-high, what is the process of that?

A. To change a high-high, do you mean make changes alleviate the high-high?

Q. No, to check the set points.

A. Oh, I'm sorry. I understand now.
Q. He -- yeah, did ask him the question about silencing, and he said. Yes, he can silence that --
A. Right.
Q. -- particular issue.
A. Right. The way the, like a high-high set point, that is determined by an engineer. And then they give the information to us. We make the changes within SCADA to follow their requests. At that point, it is possible for us to change that. That is, you know, we are trained. That is not anything you would ever do, is change.
Q. So that --
A. That's that limit.
Q. A control technician could change the high-high?
A. It would be possible, yes.
Q. It -- is there any procedure that that person has to follow? Or could they just change it if they so chose to?
A. Well, like I said, as to a procedure, it's not anything that we would change unless it was under the direction of an engineer. If there's any physical limitation to changing it, there is not.
MR. WALLACE: Okay, thank you.
MR. MAYES: Certainly.
MR. WALLACE: I'm all set.
MR. LEMMERMAN: I have no questions.
MR. EVANS: Okay.

BY MR. EVANS:
Q. When you do a change to the system, does it require a password?
A. No.
Q. Okay. Just wanted to make sure of that.
A. When you log in, there's a required password, but to make the change separately that's -- it wouldn't require a re-entry.
Q. Okay. So, SCADA systems, everyone -- seems like everyone I've ever talked about SCADA, that they have -- they have their own language in a way. Some people call alerts, notices, alarms. What do you call them?
A. Well the -- what we use is, a high or low is considered an alert. An alarm indicates a safety issue or a possible loss of a market. So, those would be considered alarms and require immediate action, within the 10 limits, of course. But that is the difference between two.
Q. So, a high-high --
A. And a low-low --
Q. -- and a low-low --
A. -- is an alarm.
Q. -- is an alarm.
A. And a high and a low is considered an alert.
Q. What is the timing that you have for a response for an alert?
A. On alert, it basically falls under the same -- the same guidelines. Some discretion depending on what is going on. For

example, in colder weather you may have to run something into a low alert to -- you know, under -- in very cold weather. So, you know, no action at that point would be required.

Q. Okay. Are these -- if we were to ask for, through document request, all alarms and alerts for this system for the last three years, would that be something we could easily get? The time it happened, where it happened? You know, I guess you only have two points on this system, right?

A. Yes. For the low system, there's just the two points.

Q. But even if we make the doc request nothing comes back, other than the one here, that would make it easy for us to explain that in the write-up when we write the -- so, we'll probably do that.

MR. ROORDA: For this market, so to speak, this --

MR. EVANS: Yes.

MR. ROORDA: -- Massachusetts?

MR. EVANS: Yeah.

MR. ROORDA: Yeah, just -- consider it done. I'll get it.

MR. EVANS: Okay.

MR. SOUTHWORTH: Can you qualify that?

MR. EVANS: Yeah, go ahead.

BY MR. SOUTHWORTH:

Q. Are you talking entire market or just this distribution area of low pressure?

A. Just this distribution area. This -- the low pressure.

(Simultaneously speaking)

MR. ROORDA: May I answer? Is that --

MR. SOUTHWORTH: Yes.

MR. ROORDA: Okay, I didn't know if you were just talking to him at this point. Yes, that answer --

MR. EVANS: Please introduce yourself.

MR. ROORDA: This is Adam Roorda, manager of gas control.

MR. EVANS: Okay.

MR. ROORDA: Yes, that information should be available. I'm not sure what the granularity will be. It might be once every five minutes or it might be hourly highs and maxes, but I'm not sure how far back you can get that granular 1-minute data. Do you --

MR. TOBIN: Do you want all the data or you just want the alerts? You don't want the data.

MR. ROORDA: No, I don't --

MR. EVANS: Just the alerts and the alarms to let the data know that it alerts and alerts others.

MR. ROORDA: Yeah, so you can look at the alarms.

MR. MAYES: For the two telemetry stations on this distribution, low pressure system.

BY MR. EVANS:

Q. I want to be able to look document say, in my product that I write, that in the last X number of years they've had this many alarms and this many alerts on this system. And if it's, one you know -- and the other thing to qualify, if you can say that -- you

know, we ask for the stuff all the time, right. And we get a lot of days and times and sometimes it doesn't get qualified. And they say -- you know, we go back to them and they say, oh, those were expected. You know, we would expect those in that situation. I don't know you can sort that out for us or not.

A. It'll be a data dive, for sure, but I believe I can sort that out for you.

Q. Yeah, the real ones, right? That's basically where we're after.

A. Yes, I can --

Q. Not that they're working on the pipe -- and this is important because most -- I mean, it's important, but I mean, in your defense, this is a good thing to have for our report. You understand?

A. Yes.

MR. WALLACE: Richard Wallace speaking.

BY MR. WALLACE:

Q. Just one quick follow up question. You talk about high-high and high. You're, for this particular system -- or I should say, in general in this market your high-high is set at what point in respect to your MAOP?

A. A high-high is MAOP.

Q. And a high is?

A. A high is when an engineer chooses where to place that as to -- for us to be aware that pressures are high, but it hasn't

reached MAOP yet.

MR. WALLACE: Okay. Thank you.

MR. MAYES: Certainly.

MR. EVANS: Roger Evans again.

BY MR. EVANS:

Q. Would the high be the MOP?

A. You could consider it the MOP. You know, we consider that normal operating range between the low alert and the high alert.

Q. I would like to use that in the report, and that's probably the most important thing.

A. Yes.

Q. So would be -- I would be accurate in saying that?

A. Yes.

Q. Okay, thank you.

A. You know, I take that back. I need to double check with engineering. They determine, you know -- like I said, they determine the alarms, you know, the maximum operating pressure. We do operate above or below those alert limits based on the --

Q. Situation?

A. You know, based on the, yeah, what's going on in the field at the time. So, in the wintertime, there are times when we operate normally between the low alert and the low-low.

MR. WALLACE: Richard Wallace one more time, one more question. You said that engineering makes that determination. Is it the engineering group within the market or is it another

engineering group outside the market?
A. Well, we'll get alarm limit changes from either the field engineers or gas systems planning. As a best practice for myself, personally, my team we, usually run those through gas to make sure they're aware.
Q. But each market and their market, gas systems market. So, you are telling me that it is the systems market and engineering from Massachusetts for this market?
A. I cannot answer that. You know, that that happens every time. There may be engineers that are working in one market or another or working in multiple markets or filling in for each other. So, it's that we have gas systems planning engineers and we also have field engineers and so either group can.
Q. Do you know what data they used to make that determination.?
A. I do not.
MR. WALLACE: Thank you.
BY MR. EVANS:
Q. You know, and I see -- excuse me. I just want to make sure I ask this question. I see you talk about high-highs, lows-highs -- highs and lows for pressure. What about flows?
A. We are able -- we do have some flow of alarms, but we don't have that regularly. It's more for a supply balancing perspective when we'll use a float alert.
Q. So that is another alert you would get though?
A. If it was actually set. You know that not every gas flow has

an alert or alarm.
Q. Okay. If in part of my write-up, I said that you had -- that we -- that you had on your system in some places a low flow indicator or alarm or alert, I would be correct?
A. We have the ability to -- for flow indication there. That's something that it may change from day to day. If there's a target of, you know, 2,400 Decatherms for the day on a certain supplier, you know, Mr. Kevin Mayes may enter into 100 pound per hour flow at his discretion.
Q. Okay. So, it's up to the controller then to set the flow, the flow of checkpoints?
A. For the flow of --
MR. LEMMERMAN: This is Darren Lemmerman. But on this low pressure system, you have no way to determine flow rates --
MR. MAYES: Correct, correct.
MR. EVANS: Okay, that's what I'm keeping at.
MR. MAYES: Yes.
MR. EVANS: So from this, write-up for this system flow is not the part of it?
MR. LEMMERMAN: Correct.
MR. EVANS: Okay. Thanks, Darren.
MR. LEMMERMAN: Thank you.

INTERVIEW OF ADAM ROORDA

BY MR. EVANS:
Q. Okay, what is the, just kind of --it wasn't -- I didn't want

to say it's unusual, but kind of, but it was awfully dry with regard to David Rhoads in his discussion -- and not because he was telling us, you know, something -- not all the details, but I'm just wondering that when a -- your system sounds like when a high tide comes in, the operator has 10 minutes with which to respond and he makes some sort of a call and then he pretty much could leave the shift and hand it off to the next guy to handle and you could go home and that the statement.

Is that a fair statement?

A. The expectation is that the controller has fully realized any set point change or any control change that they've seen it through. And so, in this particular instance, David did not have control into this market. So, they received a high-high, you know, made the call to the field.

You know David was free to go after his turnover. He was free to go drug test, so I was -- and I'm fully aware or fully sure that David would have stuck around. However, I needed him to leave to go drug testing per the, you know, requirements. You know, they would like us to get them there within two hours, I believe.

MR. EVANS: And, transcriber that was Adam Roorda speaking. Yes.

MR. ROORDA: Yes, Adam Roorda, sorry.

MR. EVANS: Just wanted to make sure. Avoid a phone call. So, okay. Let me see. Just give me a minute here.

BY MR. EVANS:

Q. So I guess, when we're talking about the way your system works, we're really saying that -- or what you're telling us and I think what we're all understanding is your role back there, since you don't have control and that you have monitoring -- because you can't close this; open this; start this pump, do this/do that -- all you can look at is say -- hey, we have low-low or we have a high-high.

A. That is correct. It's Adam Roorda.

MR. MAYES: Yes, sir.

BY MR. EVANS:

Q. That's all that you can do with this?

A. Yes.

Q. And report as needed?

A. Yes, sir.

Q. Okay, I got -- let's talk about the training a little bit. For your SCADA controllers, the training -- I'm not saying you'll know that, but what are you -- what has been the basic training? How long does it take from the day that someone walks in the door and says, hey, I want to be a controller -- how long would it take for that person to go on to one of AORs and say, you're good to go. You can fly left seat on this?

A. So currently we have a progression that goes West AOR, East AOR, North AOR. That is the progression that controller OQs on each AOR. Typically it takes a year to 18 months to qualify on

each AOR. And really the qualifier for that is sit through a winter on that AOR.

The testing, the qualification period, consists of an assessment. You know, that is a verbal assessment with SMEs sitting across from them, drilling them and then has a written test as well.

Q. Okay. What's your wash-out rate? Do you have people that you get in there and say, this guy's not or this lady's not controller material?

A. So, we didn't go over my background, but I've been in this role since June of 2017. I have only washed-out one controller. Kevin, maybe you can talk to --

MR. MAYES: And in my experience, there is a wash-out rate among controllers. I've seen it several times in my career there within nine years.

MR. EVANS: Ad as far as your company is concerned with the wash-out is that is that through -- I mean, do they get to the point where they're operating before you find out they're washed out or --

MR. MAYES: There are always -- there's always someone overseeing.

MR. EVANS: And that was --

MR. MAYES: I'm sorry, Kevin Mayes.

MR. EVANS: -- Kevin Mayes, sorry. Yeah, okay.

MR. MAYES: So we have -- I haven't mentioned, usually on a

shift we have four people. And we have not only senior controllers like myself who takes some of that aspect on and tries to guide the controllers and train them and oversee them. We have a shift supervisor as well that does that, sees to the training, overseas what they're doing. So, you know, there's -- until they are assessed to a certain level, they're watched very carefully.

INTERVIEW OF ADAM ROORDA

BY MR. EVANS:

Q. Okay. Well I apologize. We do have to get your background.

A. No, of course. Oh, sure.

Q. So, tell us a little about yourself, all right?

A. Adam Roorda. Been with the company since 2004. Started out as a meter reader. Worked through electric generation as an operation superintendent, you know, coal-fired power generation. Left the company for nine months in September of 2014; came back roughly nine months in April of 2015.

My background, I have a B.S. from Perdue University and an MBA from Ball State University; B.S. in aviation technology and general flight technology. I've been in this role since June 1st of 2017 as the manager of gas control.

Q. And that's manager of gas control?

A. Yes, sir.

Q. So, addition to the SCADA system, do you have other areas of -- that you're responsible for such as --

A. My -- I'm over the gas control team, as Kevin is a part of.

And I'm also over the gas control specialists which we have a CRM specialist, OQ specialist and two individuals that are also considered CRM specialists but they focus on change management.

Q. Okay. Okay.

MR. EVANS: Okay, we may have more questions but I think if we do have questions, in this case, we'll probably send them to you via e-mail and have you answer them that way rather than have you travel back down here again.

MR. MAYES: Oh, thank you very much.

MR. ROORDA: Appreciate it.

MR. EVANS: Yeah, I think that would work out fine. Any more questions?

MR. SOUTHWORTH: Did we want to talk about the points?

MR. EVANS: Yes, we want to talk about the points, if it's not too much. This, yes.

MR. SOUTHWORTH: Yes.

MR. EVANS: Okay, we would like maybe a layman's version of -- from looking at this, it looks, you know, we have some sort of a drop here. And, could you -- I mean, it's running along fine. All of a sudden it goes way up when the pressure rises here in town.

And then all of a sudden it drops down and then it drops way down and then it comes right -- back up. From what you know about this incident, do you have any explanations as far as what may have happened to cause --

MR. MAYES: Sure, so these drops here -- I said, I pulled all this data. This is actually about three to five minutes of stale data. So OSI PI, the historian, it pulled data in as stale when it basically did not get a good value, you know, to record.

It -- I could make assumptions as to what that may be, but it may be a communication error or, you know, these sites are cellular, you know. And so, it could be a, you know --

MR. EVANS: So, the dip set, the orange dip's --

MR. MAYES: Yes.

MR. EVANS: -- are data acquisition bare.

MR. MAYES: Yes.

MR. EVANS: The data just didn't come in?

MR. MAYES: Correct. The second trend -- you see those are actually orange dips. You can see where the stale data is at. This is out of order by the way. And you can see where the stale data is and where it will coincide to those drops.

MR. EVANS: So, would you would you relate this dip here to stale -- no, this was the actual end stuff?

MR. MAYES: Yes.

MR. EVANS: Yes. I would relate that dip there too -- like I said, I'm just making a educated assumption at this point, that that is when they began closing critical valves in the field -- began closing supply off to that system. Pressure initially dropped. That's my interpretation of that.

MR. SOUTHWORTH: So, let's tell you what -- because, you

know, what we heard the last couple days. They had, you know, they were doing that -- where's the picture? It's probably much to -- but, I'm not sure if you look at all of this, but they were doing this work.

And during the process of this, you know, the pressure went up and a person had to actually put his foot over the opening to stop the flow. That's what his -- his foreman told him that. And we're wondering if that could be coincident with -- because the timing's kind of close.

MR. MAYES: I don't know. I mean, I can't -- I have provided, though, the minute pressure data for both of these systems, so if, you know, if that's a correlation that can be made from other testimonies, you know, that -- I'm sorry, I can't make that call as I don't know the time

MR. SOUTHWORTH: Yes.

MR. MAYES: And from this trend it's not granular enough for me to give you that.

MR. SOUTHWORTH: But, in your opinion, could you rule it out?

MR. MAYES: I'm sorry I don't have --

MR. SOUTHWORTH: Okay.

MR. MAYES: -- the knowledge of -- you know, I'm still kind of confused by sticking their foot on something to stop flow. So --

MR. WALLACE: You're not an expert on that.

MR. EVANS: We are too, so --

MR. LEMMERMAN: I've seen more than feet try to stop the flow.

MR. EVANS: Right.

MR. MAYES: I do have a background in instrumentation from the power plant and so I'm at a loss.

MR. EVANS: Yeah, okay. Okay.

MR. WALLACE: Can you explain the flat line on top of this chart, why it's flat?

MR. MAYES: So when I was in the control room my original thought was either there was a relief on the system or something that began venting at that pressure or a monitor or something that only let the pressure get that high.

From what I've been told that, as I understand, is that the pressure may have went higher than that. So, it's very possible that that transducer was maxed out in range to stop reading.

MR. EVANS: Excuse me. So, on this system, we haven't actually -- I asked this question all week or all the interviews we've done. The -- what the -- in your education of this system, what is the pressure control -- you know what controls the pressure? You know, if you have overpressure what happens in the system?

MR. ROORDA: So, I do not know this system at all. You know, I have fundamental pressure control knowledge. So, there should be a process variable downstream that is being controlled by a controller to regulate that pressure.

MR. EVANS: Okay.

MR. ROORDA: Once again it's Adam Roorda.
MR. EVANS: Okay. Have you seen by chance?
MR. MAYES: Yeah, it's monitor regulator is what you're referring to.
MR. EVANS: Yeah, okay.
MR. MAYES: In the situation.
MR. TOBIN: It's a good question for Jeff in the morning.
MR. EVANS: Jeff?
MR. MAYES: Yeah, Jeff is the guy to talk to about that.
MR. EVANS: Okay. Good deal. Any -- yes, sir?
MR. LEMMERMAN: So. this is Darren Lemmerman again. Of the 14 reg stations, how many of those have ERX recording devices on them? Do you know?
MR. MAYES: I do not know. That we see in SCADA is zero, but there may be multiple ones that the field downloads on some frequency. But I don't know the number.
MR. LEMMERMAN: And SCADA -- what does SCADA see? How many stations and what are they? What's their names?
MR. MAYES: SCADA sees these two points. One is called South Lawrence, and the other is -- I'm going to butcher the name -- but Riverina.
MR. LEMMERMAN: Okay, thank you.
MR. MAYES: Yes.
MR. EVANS: Anything else?
MR. WALLACE: Richard Wallace speaking. Do you know what

those transducers are set for, those meters?

MR. MAYES: I do -- I do not. Intermittent controls would be the go-to department.

MR. ROORDA: They do pass language onto control ---

MR. MAYES: No.

MR. ROORDA: I'm sorry -- that information onto control.

MR. WALLACE: Okay, Thank you.

MR. MAYES: Yes, sir.

MR. EVANS: The only other thing for the report, we may request these to be like high quality graphics, like the colored over there. And this one. So, we don't lose them, could --

MR. ROORDA: We have the Excel data. This is just a print out. And I'm sure they can do whatever you want with it.

MR. EVANS: Yeah, I'd like -- I just want -- like that one there, I would like it to be something I could put in the report that's -- the color one back there, right?

MR. MAYES: Yes.

MR. EVANS: Yeah. I would actually like the image file if you get that.

MR. MAYES: I cannot give you the image. I have provided JPEGs of this to Meghan Birmingham. Is that acceptable?

MR. ROORDA: So, they're probably already on your site.

MR. MAYES: JPEG and -- yes.

MR. EVANS: Oh, okay. Yeah, that's what I was looking for.

MR. MAYES: So, yeah. Yeah, so --

MR. ROORDA: You -- my understanding is you told them all you want are PDFs. So, they had been converting everything to a PDF to satisfy your request. If you want --

MR. EVANS: Yeah, on this -- but this type of thing --

MR. MAYES: I can send that.

MR. ROORDA: JPEGs are okay?

MR. EVANS: JPEG's fine.

MR. MAYES: Certainly. Yes, sir.

MR. ROORDA: Because they converted Excel to a PDF, which I kind of rolled my eyes at.

MR. EVANS: That's okay.

MR. ROORDA: Do you do you want the Excel? If I were you want the Excel.

MR. EVANS: Yeah.

MR. MAYES: Yeah, and I put these in as PDFs as well, but I still have the JPEGs.

MR. EVANS: Okay.

MR. MAYES: It's no big deal. Everything that you have, I have given, you know, Mrs. -- Miss -- yeah, Mrs. Birmingham.

MR. EVANS: So one of the things I want to explain to you, just so you know -- are we done then? Are we finished? I'm good.

MR. LEMMERMAN: I'm finished.

MR. WALLACE: I'm fine.

MR. EVANS: Okay, off the record.

(Whereupon, the interview was concluded.)

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 Adam Roorda and Kevin Mayes

ACCIDENT NUMBER: PLD18MR003

PLACE:

DATE: September 14, 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.

Kimberlee Kondrat
Transcriber