UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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| Investigation of: | * |
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| MERRIMACK VALLEY RESIDENTIAL GAS | * |
| FIRES AND EXPLOSIONS | * Accident No.: PLD18MR003 |
| SEPTEMBER 13, 2018 | * |
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Interview of: JOSE L. MADERA, JR.

Northern Essex Community College
Lawrence, Massachusetts

Sunday,
September 16, 2018

APPEARANCES:

ROGER EVANS, Investigator in Charge
National Transportation Safety Board

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

DAVID NELSON, Operations Manager
Columbia Gas

EOIN BEIRNE, Esq.
Mintz Levin
(On behalf of Mr. Madera)

I N D E X

I N T E R V I E W

(11:52 a.m.)

MR. EVANS: We're on the record with Jose L. Madera, Jr. Good morning, still morning. Today is September 16, 2018. It is now 11:52. My name is Roger Evans. I'm the investigator in charge for this accident for the National Transportation Safety Board out of Washington, D.C.

We are at the Essex Community College in Lawrence, Mass. This interview is being conducted as part of the investigation into the South Lawrence multiple housing explosion accident that occurred in Lawrence, Mass, on September 13, 2018. The NTSB case number for this event is PLD18MR003.

This interview is being recorded. 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. Madera, you are permitted to have one other person present during the interview. This is a person or your choice -- supervisor, friend, family member or nobody at all. Please state for the record the full spelling of your name, and who you have chosen to represent you today.

MR. MADERA: My name is Jose Madera. It's spelled J-o-s-e, middle initial L, last name Madera, M-a-d-e-r-a, and the suffix is Junior.

MR. EVANS: Thank you.

MR. MADERA: J-r.

MR. EVANS: Okay.

MR. MADERA: And to my right, I have my attorney, Eoin Beirne, representing me.

MR. EVANS: Okay. And, Mr. Beirne, can you go ahead and introduce yourself with the spelling or your name and your practice.

MR. BEIRNE: Eoin Beirne, E-o-i-n, B-e-i-r-n-e, of the Mintz Levin firm in Boston for Mr. Madera.

MR. EVANS: Thank you.

Now I'd like to go around the room, and have other participants introduce themselves with the spelling of their name and their affiliation of their agency or firm.

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

MR. NELSON: David Nelson, D-a-v-i-d, N-e-l-s-o-n, Operations Manager, Columbia Gas.

INTERVIEW OF JOSE L. MADERA, JR.

BY MR. EVANS:

Q. Okay. Thank you, Jose, for coming in today. Appreciate it. It's -- you know, we're all about safety, and having people agree to interview with us, it's all about supporting that goal we have.

Before we begin, I'd like to get some -- into the real questions, I'd like to get some background information on you.

Just the firms you've worked with, and who you're working with right now, and what your job title is. Can we start with that?
A. Yeah. Prior to Feeney Brothers, I worked for All Drain Services out of Dracut, Mass. I currently work for Feeney Brothers Utilities, Excavation Services. And prior to All Drain Services, I worked for Drain King, which is another sewer and drain company.
Q. Okay. Can you go ahead and spell the Feeney Brother -- the names of those companies for us?
A. Okay. Feeney Brothers, F-e-e-n-e-y, B-r-o-s, U-t-i-l-i-t-y, S-e-r-v-i-c-e-s.
Q. Okay. And the previous firm you worked for?
A. All Drain Services is A-l-l, D-r-a-i-n, S-e-r-v-i-c-e-s.
Q. And can we go back as far as when you started in this kind of work, what year was that?
A. I started doing utilities for sewer and drain 2005, and then I transitioned to gas work 2017.
Q. And that whole time you were in --
A. Feeney Brothers.
Q. The whole time you've been at Feeney Brothers?
A. Yeah.
Q. But at one time you worked in sewer and drain, then you transitioned to gas?
A. Correct.

Q. Okay. Make sure I had that. And what type of equipment do you -- do you operate equipment?
A. I do, but I don't operate for Feeney. I'm a laborer.
Q. Okay.
A. I do have my hoisting engineer license, 2A/1C.
Q. I'm sorry. Can you repeat that?
A. I do have the hoisting engineer license, 2A/1C.
Q. Okay. Your history of working with gas, can you kind of go into the different kind of gas projects you've done? I mean, have you done more industrial or more home? Where -- what have you done more of?
A. I've done more industrial, setting main lines, and then after putting the main in, tying in the services to each home individually or business, whatever was on the street that I worked on.
Q. Okay. So in your work, and I want to kind of go deep back in -- this -- the answers to this question I don't care if you're kind of off a little bit, but just as best you can recall for this particular topic. When you are working, what type of individuals from -- or what job position type people would you have, would you see on your jobs that work for, you know, different agencies, other utilities? Can you kind of give us a --
A. Usually on the jobsite we have our five-man crew, which consists of a foreman, two laborers, an operator and a truck driver. And then we have an inspector from the gas company, and

then we have, whether one or two, police details depending on how big the road we're working on and how much manpower we need to direct traffic.

Q. Okay. So is this the standard crew when you go out?

A. Yes.

Q. So no matter job you're doing in the world of gas, you're -- you'll have two laborers, truck driver?

A. Well, depending on the job, I guess, description, depending, some jobs might call for two crews. I've never been in the situation where we worked with two crews. I've work with another crew probably, you know, halfway down the street on the same street who was probably doing the service at the same time.

Q. Okay.

A. But other than that, never worked more than a five-man crew.

Q. Okay. When you are going to -- let's just say you're going to break ground, right, what paperwork do you have in your hand that says I'm good to go to break ground?

A. Usually we get briefed prior to, at the end of the crew truck by our foreman, and he tells us what job we have ahead of us for the day, and we check the markings usually prior to us digging anything. Dig Safe comes out, marks everything. Gas company also sometimes has someone out. And usually once we know where the markings are, just the asphalt is taken up, and pretty much it's hand dug until we locate what we're looking for, and then pretty

much kind of try to set up and dig around it versus on it for safety purposes.
Q. Have you been involved with a hit where gas was released?
A. No.
Q. Oh. Okay. Have you had an occasion in your history for all these years doing gas work, have you had a stop work order by someone saying you have to stop because something is not right or --
A. No.
Q. No. No any kind of like a infraction written up by --
A. No.
Q. -- some party or nothing like that?
A. No.
Q. Have you seen anybody get written up?
A. No, I haven't. But I'm pretty sure there has been lines that have been ripped in the past, but I had no part of it, but I've never personally been written up. Never been on a crew that has been written up either.
Q. Any of your peers that you know have been, you know, your buddies?
A. Not that I know of.
Q. Okay. Have you ever heard of anyone getting a stop work on them by -- for something that was going, not quite going right, and they said, hey, stop, we're going to stop this --
A. No.

Q. -- right now?
A. No.
Q. Okay. Do you have authority to stop work?
A. Yes, I do.
Q. Okay. And what would be an occasion when you might stop work?
A. If the operator's digging, he's digging too close to the a line, if a T's coming off a main that we don't know was there, and sometimes -- you know, it's our job watching the operator as he digs. If we see anything, we have the right to stop digging, stop, you know, all operations for safety. And, you know, anyone in the crew has the authority to stop a job right away. We all have, we all have that authority.
Q. Have you done that in your own career?
A. While digging, you know, if a line is exposed that we didn't know was there, sometimes if we're digging and there's a water line that wasn't -- is marked, but sometimes the markings are off, but and we see it before an accident occurs, stop, let me check there. You see some warning tape sometimes. Usually that will stop -- warning tape, let me check something's there. So that's -- we've had, I've had several times to just say hold on, give me a second; let me double check, make sure nothing is there.
Q. Okay.
A. And that's pretty much why I probably have the success of no accidents, thank God.

Q. Now let's talk about the 70 homes. In your career have you worked in that neighborhood for, you know, bunch of times in your career?
A. I've been a resident of Lawrence for 27 years. I actually personally was affected by it. I live in the South Lawrence area. My home is on high pressure, so we have a regulator, and my son is also an employee of Feeney Brothers, who is a pipefitter. So he was actually home, arriving home when all the chaos was going on. And I had him -- you know, just told him shut the meter, the gas meter, and just make sure the neighbors are safe.

But I've lived in Lawrence since 1991, and I actually run a boxing program here also for the past 9 years. So I'm very in the community, so to speak.
Q. Okay. So but as far as that neighborhood that you -- you live near that, I guess in the neighborhood, right?
A. Yeah.
Q. But you're on a high pressure system. Okay. Have you done a lot of work?
A. Predominantly since I started with Bill Deroche crew, my foreman, that's what we've been doing all summer, anywhere between 13 and 15 cut-off and tie-ins, aided in.
Q. In the immediate area of the where the explosions occurred?
A. Well, pretty much in the South Lawrence area.
Q. And South Lawrence includes the whole neighborhood?
A. The area we was working, yes.

Q. Okay. Good. So when you are doing something like excavating for them to cut into a line or restore a line, pull one out, put one in, who do you see on the scene from Columbia?
A. The inspector. Usually the inspector is there, and our five-man crew. Sometimes another inspector will pass by, but I don't know if it's just to discuss something, but usually it's one inspector from the gas company.
Q. Does that inspector share anything? Does he show you a drawing or does he show you a picture? Does he show you --
A. He usually gives our foreman a packet of the job description we're to perform, and it has drawings, blueprints of what type, what cut, and it also has a step-by-step procedure on how to put the bags in, you know, set up the setup for the cut off and the time, the step-by-step procedure.
Q. Okay. And you always follow by the numbers? Are they --
A. Oh, absolutely. Our foreman, Bill Deroche, is we call him by the book Billy because he is very -- he runs the straight ledge. No shortcuts with that guy.
Q. His nickname is Button.
A. By the Book Billy.
Q. By the Book Billy. Glad to hear that. You just spoke well of the company. Okay. So you follow that all the way down?
A. Yes.
Q. Okay. So let's just say that he -- you have a paint by numbers you have to use, right, and you're going to do all these

steps, and something doesn't work quite right, and he says, wait a minute, we can't, we can't do, we can't go from step five to step six because there's something, there's a problem. What would happen then?

A. I think his immediate response would be to notify the inspector onsite, which is usually standing there with us anyway.

Q. Okay. Have you ever had an occasion when you're excavating and there was no inspector around anywhere?

A. No.

Q. Never?

A. Usually we take breaks together, you know, take our 15-minute, our lunch break, and that's pretty much. We pretty much stay as a group. Because of the severity of we're dealing with live gas. And we never want to leave the hole unattended. So, you know, people could drive in the hole, people will walk in the hole sometimes, you know, pedestrians ignore safety barriers, and we go, where are you going?

So but other than that we usually do everything as a group usually. The only time probably when the truck driver leaves to go get hardtop or some gravel that it will be one guy less or something or, you know, someone has to go get materials for the job itself. Usually we're stuck together.

Q. Okay. So in your career of doing this kind of work, has the inspector ever, you know, not stopped what you were doing, but he

had to kind of say we can't do it this way, I'm going to go call the office and get some guidance on this or anything like that?
A. My past experience, no. Usually, you know, prior to the situation the other day we haven't had any incidents of, you know, pause, give me a second, let me make sure. It's pretty much all been -- it's been all cut clean pretty much with the book, you know, the pamphlet we get prior to doing the job. We have diagrams. We have step-by-step procedure. Whatever needs -- for time preferences, you know, on the cooking and the cooling of the pipe or the bags itself, you know, everything is on a time and step pretty much.
Q. So to your -- to the best of your knowledge when you get one of these packages it's gone through -- Mr. Bill there goes through and says, okay, we're going to do it by the numbers, and that's it.
A. Pretty much.
Q. Not detract from the numbers.
A. No, yeah, he's a step-by-step. To see -- I'll give you an example. If he wants 4 inches of asphalt, and we put a half-inch of gravel to high, we're scraping that half inch out. He's that by the book.
Q. Okay.
A. He's had it, done it quite a few times. That's too high. Get a half inch out. He likes to be precise in what he does pretty much.

Q. What about wires that you, you know, when you excavate and sometimes you see the control sensing wires that they get tied into a regulator, and they go and get tied into a pipe?
A. I've never seen regulator wires. I've seen just trace wire, and then I've also see wire like for electric conduit. Sometimes they have a duct bank, you know, for the street lights. That's the only wire. But I've never seen a sensor wire. I've never worked with a sensor wire.
Q. When you're getting close to a regulator, I mean, are you, you know, how much of your work is hand digging versus mechanized?
A. I've never worked near a regulator that I know of, to be honest. Pretty much everything was, like, pretty much the last 13 to 15 times we did was peel the hots off. We know the pipe's in this area. Dig down, locate it, figure out the depth, how much clearance we have before we have to hand dig the rest, and usually it's been all the same process. Usually there's a stub in the hold for the main, and a section was cutting out and the stub was tied into the -- to the old, and that's pretty much what I've experienced.
Q. So have you ever had an occasion when, you know, By the Book Billy, he was not there, and you had somebody else?
A. Only one time one day, and it was just backfilling, and that was it.
Q. Okay.
A. It was just backfilling. No pipe work was done.

Q. So all of the work that you do, you do as this team.
A. Usually a two or three-leg process, depending on the size of the pipe. You know, 8 inches is harder to maneuver around than 4 inch. And depending how big the tie-in is. Sometimes it's longer footage, probably about 4 or 5 feet, not much too longer, but it's pretty much all the same.
Q. Okay. So when you're doing your work do you ever feel unsafe?
A. Not really. But after experiencing what I experienced, it spun me around in the sense of this really happens. I've never heard of a chaotic situation like -- I've heard of probably a single house and, you know, certain around the country and stuff. But I was, like, wow, what's going on?
Q. Right. But I mean in all the time you've been doing your work, you haven't had this uneasy feeling about working around gas? You're comfortable with it?
A. Yeah.
Q. You felt safe and all that type of thing?
A. Yeah. I've never had that scary situation, and, you know, obviously you don't think it will happen to you until it actually happens to you. I know it was -- it's a possibility it can, you know, I'm working with live gas, anything can happen any given second. So that's why pretty much most of the time I'm alert. I try to stay alert with even hand digging next to the pipes sometimes, sometimes depending on the condition of the pipe, you

know, you don't want to even touch the pipe. But other than that, I've been confident. I've been confident with the crew that I work with. We bond together after work for so long. And just working with the company itself, try to make each other feel safe, you know.

Q. Okay.

A. Like when the situation occurred, you know, your natural reaction is to run, but I'm in the hole with my other co-worker and, obviously, we're going to have each other's back. I asked him if he was okay. He asked me the same. We're fine. And after that it was, you know, we did what we did to contain and excavate and stuff like that.

Q. Okay. So now I have some background on what you do, and your -- kind of like your boss and all that. To go back from the day of the accident, and from the time you work up from your best recall, I'm going to go through that whole day.

A. Okay.

Q. So let's go there.

A. So I woke up 6 a.m., normal routine. Washed up, got dressed, left my house quarter of 7, and I arrived at the job site 10 of 7. I live about 5 minutes away. And the rest of the crew was arriving as I was arriving. Billy was already there. And once we were all there, we took all the road blockage equipment cones, you know, safety tape, et cetera, we just took it out to the back of

the truck because we couldn't set up because our police detail was arriving an hour late.

So once he arrived at 8 o'clock, I assisted the rest of the crew in blocking off the road, setting up detour signs and safety perimeters with the cones and the sidewalk signs. And before we pulled any plates, my foreman, Billy, asked me if I can go to Columbia Gas to pick up some materials for the job we were doing, which consisted of Servi-Seals, Wax-Tape, Wax-Primer, plugs, a fusion tee, and a stack fitting, and pipe dope, I think. Oh, and soap, bubble, safety soap for the bubbles, for leaks, leak test.

And then after that -- so I left probably roughly 8:10, 8 o'clock, and took off to Columbia, got my supplies, and I probably got back to the jobsite probably quarter to 9, 10 minutes to 9. And then we have coffee break. The office had provided us with coffee.

So once we had the coffee, there was -- we already had the equipment out pretty much. The guys kept taking the rest of the equipment out prior to me arriving. I put my fire suit on to assist my laborer, lead laborer, and he started to set up his gauges. And once the gauges were set up and, you know, we had a visual of all the gauges, what pressure was on them, which was 9½ inches, and he set up his bypass. And once the bypass was set up, he set up for the bags. And then once the bags were set up, they dropped the bags. As this -- during this whole process, we're

observing pressure gauges, all three gauges, one being on stub, and then two on -- one on each end of the cast iron.

Once the bags were settled, the bag pressure didn't drop, the gas pressure didn't drop or rise, then proceeded to cut off the section of the main. And once that was cut, he capped off the dead side, which was toward the south union side. He capped it off. Pressure gauges, everything still fine. Then dry fitted the tie-in piece. And once it was dry fitted, and it was the right measurements, he fused on -- cut off -- well, cut off the gas to the plastic, then cut, and then fused the plastic in, and just had the coupling for to attach to the cast. Wasn't fastened because you have to allow the fusion to cool off temperature, and make sure that's cured correctly.

And once that was -- that had its cool off time, which is about 45 minutes in total, have a clamp, in which you release the clamp, let it cool down more. Tied in the mechanical coupling. The gauges are still fine. Shut off the bypass. Took off the plastic 2-inch to the bypass. Both valves were shut. That's each bypass that's connected to a valve in a tee that goes into the main. Shut the valves, took the plastic off. Gauges are still fine. Waited about 15, 20 minutes. Nothing changed. Proceeded to take off the gauges.

Everything seemed fine. And once he was unscrewing the tee to the bypass, when he got to the last thread and was supposed to plug it, it was just blown out of his hand. And that's when we

noticed, like, this isn't low pressure, like, what just happened? Our inspector and our foreman immediately was, like, cover it. A natural reaction. We just -- we footed it because it was just a 2-inch plug that was escaping from the Servi-Seal; put a foot on it. And our biggest concern was to contain it. We took the bypass, which has a valve on it, a shutoff valve on it. We opened the valve. We threaded it back into the Servi-Seal, and then we was able to shut the valve and contain the gas from dispersing into the air.

And then after that, you know, inspector Rich Fadad (ph.), he contacted immediately Columbia and a bunch of other supervisors and inspectors were dispatched to the scene. And a gentleman by the name of Rob called for a briefing, and we were all assigned pretty much a critical valve in the area which, you know, he sent a group of two guys to shut off the valve to pretty much stop the flow of the gas in the immediate area.

And once we did that, I assisted in evacuating homes pretty much in the immediate area. Because we didn't know exactly where everything was going on, but we can see that with all the first responders just driving frantic and just pedestrians not knowing where to drive because it was so much congestion. It was actually just about rush-hour. Everybody is getting out of school. Everybody is getting home from work. So it was a lot of congestion in the traffic, and it was very hard for emergency responders to get to certain destinations. And we was also being

assisted by other cities and towns. They don't know the streets as well as the local departments do. So it was very chaotic.

And then after that, I assisted. And then around, I would say 7, 7:30, we were transported to Columbia, and we were then interviewed there, and protocol, all, you know, interviewed, and pretty much breathalyzer and drug screened. And stood there to about 2:30 in the morning. And I personally was affected by the situation because I live in the South Lawrence area, and I had no gas and no power. So I have a family of six, four children, me and my wife. So we were all displaced, and we stay at our father-in-law's house.

And after the all the looting started, I went back to my house because I had three dogs there. So I just go home to the dogs. But was a long day, very long. Left my house quarter to 7, and arrived -- well, I didn't get home, but I got to my in-laws about quarter past 3. So it was --

Q. In the morning?

A. In the morning, yeah. So it was a very long day. But it was very chaotic, but as a group of the people that are on scene, I think we held it together in the sense of we didn't panic in the sense of we was trying to contain the situation. But people they don't know what's going on as pedestrians. I mean, they're going by rumors. They was kind of, you know, frantic -- oh, fire there, the fire there.

But our number one reaction to do once the situation occurred -- and actually prior to us -- prior to the tee blowing off the main, there was already fires going on, I'd say 15, 20 minutes prior to before we actually knew what was going on. We realized what was going on once the tee blew off, but we didn't know why firefighters were flying by us 15, 20 minutes prior to us. And that's when that situation occurred, and that's when we knew that wasn't level pressure anymore. It was all low, you know, it was all low pressure that we was working on; so it was like that's not low pressure. Because when he took the gauge off, he was able to put his hand over it, and put the plug on. There was no putting the plug on once the tee came off.

Q. Okay. Thank you for that. Your recall is excellent, by the way. I mean, I can tell that everything you said was --

A. It kind of --

Q. -- clear in your mind, embedded.

A. It's not as bad but, you know, because thank God, you know, the fatalities and everything was, but it was kind of a reminder of 9/11, which just happened 2 days ago, and we all had a reminder of the -- seeing the situation with the panic and the fire, you know, the first responders. You know, it was, like, this is crazy. People yelling. We were trying to direct traffic. First responders -- I'm not a police; I don't do police detailing work. I really don't know how to direct traffic, but I did what I can do. And there was actually a lot of elderly people who lived on

the street. So I pretty much bang on every door and window just, you know -- and people, like, I'm not leaving my house. I'm like, if you smell gas, you need to get out. This is serious.

But I've never been in a situation like that. Thank God I've never had no prior accidents with a pipe bursting or any of that. The pipe didn't burst; it was just the tee, the pressure just blew the tee off of the pipe. It never erupted and we was able to contain it. And was smart thinking, we put the valve back on, shut -- we was able to, you know, get the tee back on with the valve and shut it off with the valve, with the valve that it had on it. And that's used for the setup of the bypass, so -- which was just quick thinking, contain it.

It was very scary though. I was -- I'm still a little shook up about it in the sense of, wow, you know. It could have been totally different. I could have died or, you know, God forbid, my family, anybody.

Q. Right.

A. It was definitely -- it was a lot personal for me being that I lived in the area. So I was affected personally by it, you know, so.

Q. Right.

A. I was on both sides of it. I'm working with gas, and then I was also -- I don't consider it a victim, but I was affected by it.

Q. Right.

A. My neighborhood that's a community itself too.
Q. Okay. I need go to -- one thing that I failed to ask you, and I didn't hear it in your explanation. The address you were at when this occurred with the tee and all that, what address was that?
A. We was on the intersection of Salem Street and South Union Street. One the side of the Common, South Common Park.
Q. Intersection of Lexington?
A. Salem.
Q. Salem.
A. And South Union Street.
Q. Salem and South Union. And how far is that from where the homes were exploding? Block away? Mile away?
A. Well, I don't know exactly what -- where was the first one that was erupted. I say probably at the closest one was -- to us was on Salem Street. The next street over the house didn't totally burn. I think just the furnace burned, and they was able to contain it. And then I can see smoke coming from the North Andover area, which is on Mass Ave. And we could see smoke coming down from Winthrop Ave, which has a six-way intersection.
Q. Right.
A. You can see smoke. You can smell it. It wasn't a black smoke. It was more of a yellow smoke.

Q. Okay. So you told us that you're hearing emergency vehicles for 15 minutes, and then all of a sudden you have this issue with your tee, right. During that 15 minutes did you hear explosions?
A. I didn't hear any explosions. Just more you seen the -- we noticed the houses are burning because you can see the yellow smoke coming out of the chimney stack.
Q. Right.
A. So and it wasn't just natural smoke where you're burning wood in the wood stove.
Q. Right.
A. It was dark orange and very orangey. And the first one -- most of the firefighters first, I think, were going past us on Salem Street towards Mass Ave. And from my understanding you have Shawsheen Terrace, and two, actually two streets over from Salem. So we're on Salem. We got Bailey and then Abbott Street. On Abbott Street there was a fire also, and we can see the smoke and smell that.
Q. Okay. In all of your experience you've never experienced a situation where you essentially tie into a high pressure main thinking it was a low pressure main?
A. No, never.
Q. Never happened?
A. Never.
Q. Okay. What was the -- was the inspector there with you when all of this was going on?

A. Yeah.
Q. Was he -- did he say anything?
A. He was, like, you know, like, what's going on? And he immediately was on the phone. I'm not sure who he was calling. And he was, like, even, you know, my foreman, who has been with the company, I don't know, 20 plus years, he was, like, he's never seen something like that. And we was, like, what's going on? From put your hand over and plug it to -- can't get your plug on not even your hand. It was very unexpectedly. You try to feel like you're prepared for every situation, but I felt with that situation happening, like, you never know when it's going to happen. You think I'm ready, you know. We're always briefed about safety. We have -- always having company safety meetings just to remind us. We got a daily dig every morning from our company, you know, reminding us of safety. And now it's happening. What do you do? How do you react? It was more of a do I freeze? Do I run? Do I assist? And I have that good heart, and I've pretty much always tried to aid and assist, especially in a situation like that. I've had neighbors' houses burn, which I assisted. But this was totally different. Off guard I can say.
Q. Yeah.
A. It's the end of the day. Everything is pretty much cleaned up. Our work area is cleaned up. We're just breaking down. We wasn't going to backfill because it was already the end of the day. So we was, like, all right, tomorrow we come, you know, we

do it, like I said, we do it in usually 2 or 3 days. Locate. Everything's clean. We prep our pieces. We test every, you know, every piece we make. Everything is air tested. Bypass is air tested. And once we do our tie-in we usually let it settle. Make sure, you know, check for leaks. Nothing is leaking. All right, cool. Tomorrow we'll come in, we'll backfill it. Depending how big the hole is. Sometimes the trench is 20 feet, 8 feet wide, you know, 4-1/2 feet deep. So it's a lot of compacting and Wax-Taping, and --

Q. Right.

A. -- those extra measures we put prior to backfilling. Wax-Taping all the joints, everything we touch, make sure the tracer wire is connected. We have our markables in places, our warning tape for if the next person has to dig in the immediate area there's warning tape. And then everything is compacted, asphalted. That's pretty much how it goes. It's been that way since I started.

Q. Okay. So do you know if anyone took any photographs of the open ditch?

A. Usually Billy does. I'm pretty sure he did. Once we complete, he usually with the iPad that he uses every day to keep all his notes and stuff, he usually takes a picture. And if I'm not wrong, he did take a picture.

Q. Okay.

A. Yeah. He takes a picture of everything. Good to have a visual.
Q. Yeah.
A. If it's buried, you can try to visualize it. At least you have a picture better to tell you exactly where to do that. Usually markings, and then that's another thing. Once we finish and we backfill, we mark off everything that was done.
Q. Okay.
A. If it's an end cap or, you know, everything. The pressure is always put on, the pressure of the line, the size of the line. So there's no confusion whether it's a 4 or an 8-inch.
Q. Okay. So what is -- how do you spell Billy's last name again?
A. Deroche. D-e-r-o-s-c -- no -- c-h-e.
Q. C-h-e?
A. Yeah.
MR. EVANS: Okay. We'll definitely want to talk to him. Are you appearing for Billy?
UNIDENTIFIED SPEAKER: Yes.
MR. EVANS: Okay. Yeah, we'll -- is he scheduled already or no?
UNIDENTIFIED SPEAKER: You talking about -- I believe he's scheduled for tomorrow morning.
MR. EVANS: Okay. Good.
BY MR. EVANS:

Q. So the work instruction package that you were using that day, right, was there anything with regard to, you know, previous to this event was there any discussions about anything at all to do with the work package?
A. Not at all.
Q. Some routine stuff?
A. I thought it was out last tie-in, to be honest.
Q. Okay.
A. I wasn't -- I'm not sure. It was nothing out of the -- different that he explained to us or that I read on the packet myself. I didn't see anything different. I didn't see any abnormal operating conditions at all. The pipe before even being touched was intact. It had marks on them, all the bells and marks. There was no leaks on the pipe. And the plastic that was in there was fairly new. So I never in my day, like, thought something like that would occur.
Q. Okay. So what about was there any -- I know in your work you guys are probably so used to smelling mercaptan in the gas, natural gas. Was there any unusual level of natural gas before this happened that you had?
A. No.
Q. Nothing like that?
A. The first thing we did was put the meters in, and --
Q. No alarm?
A. -- the gauges.

Q. Gauges.
A. The gauges, everything was held at 9½. Nothing dropped, nothing went out.
MR. EVANS: Okay. That's all from me right now.
MR. WALLACE: Are you all set? You -- I'm sorry. Richard Wallace speaking.
BY MR. WALLACE:
Q. Do you need to take a break or --
A. No. I'm all set.
Q. Okay. I do have a few questions. You said you went to work for Feeney in 2016?
A. '17.
Q. '17. I'm sorry. '17. What kind of training did you get at that time?
A. Lot of videos, couple -- I did -- took eight tests, eight written tests, and pretty much I was -- my basic qualifications as a -- for a laborer. All I pretty much do is assist the lead laborer passing tools, carrying the pipe in the hole, out the hole, cleaning the pipe, hand digging. And my job pretty much is while he's doing all the tapping, drilling, and cutting, I'm observing gauges. Whatever tools need to be passed or soap tested, I'm there kind of pretty much. And that's -- I did that, I did the -- took week training, 40-hour training, and I took my written tests, passed them all, and then I started off with a scattered service gentleman. I forget his name was Chris. I

don't know his -- remember his last name. I did a couple scattered services with him, and then I was put on a permanent crew in the West Newton area. And the commute was taking a toll on me from Lawrence every day so I had to leave extra early, get home late.

So this year I transferred to Lawrence area, and I started up here in April. I felt with Billy I've learned the most being my prior foreman and the other guys that I've, you know, I usually work on Saturdays. I volunteer to work every Saturday. So I go where they need me, and everybody pretty much does the same, but Billy is more of a teacher. Tells you what you're doing, and why you're doing it. He explains it more. He's always been very -- a lot of people sometimes, you know, they worked with Billy in the past, say I need to go on a different crew because he's so tedious. Which is fine with me. I look at it as a learning experience more.

My goal is to be a foreman someday. Soon hopefully, because I am getting -- I'm not young; 43. But I have the confidence, and I feel with -- I like to, I think, with hands-on experience I learn more, but I -- I'm trying to absorb everything I can now to get me to where I want to be as a foreman. And every day is a learning experience for me. And I think that it was nothing out of the ordinary that we did. It was different than I've done in the past. So I didn't feel unsafe, but I thought my training that I've learned, obviously it did help on the situation where, you

know, how we contained. We helped evacuate, and we aided and assisted everything and everyone around us. I felt I definitely had enough training to perform the tasks at hand.

Q. Thank you. You mentioned before abnormal operating conditions. As a laborer, did you get any kind of training for what they also call AOC's.

A. Yes. We watch videos on abnormal operating conditions. Sometimes it could be weather. It can be infrastructure in the ground. Sometimes the duct banks, sewer pipes. And depending, you know, the ground's frozen; we can't dig when it's cold. And also just more the abnormal operating conditions would be more of a safety hazard so to speak. If it's, like, you know, no cell phones in the hole, you know, a spark. But other than that, we ground everything.

That's another thing. So everything is grounded always far as static. So I didn't feel it was anything, you know, there was no weather abnormal, you know. It was nice out, sunny out. So that wasn't a factor. There were no other utilities in the immediate area where we was working on that were going to be in the way or tampered with. So I didn't think of any that could possibly be any abnormal. Because knowing that I work with gas, I want to live to go home too. So I don't think that I would put myself never mind someone else in that position to work or want to work in an abnormal operating.

Sometimes we get a little drizzle, and I'll joke around, and say ain't this a abnormal operating condition? We can't fuse no pipes today. Let's go home. Just want to go home. But, you know, it's a joke, but it has some meaning behind it. But if that's the situation, we definitely won't do any pipe in that sort of environment. But so that's how I kind of refresh myself, you know, with a joke sometime it refreshes us that it's serious, be alert. Any given second things can go the wrong way.

So, and I feel that we reacted well as a team, and everybody around us in the immediate, you know, we can only do so much at the end of the day. Just it was chaotic. So, you know, but I think the response overall we reacted well, and that comes from training. I think if I didn't have any training, yeah, I would have probably got out the hole and ran down the street, like F this, I'm out of here. But I felt confidence.

Some people they smell gas, oh, my God. No, no. Sometimes, you know, when you purge a line, neighbors come out, I smell gas. Yeah, yeah, that's all right. We just purged the line. Oh, okay. It gives them some sort of comfort. But if I -- I would feel the same way if I never worked with gas. After working with it, and dealing with it, you know, there's sometimes when I walk by somewhere and I'll be, like, I smell gas now. Because now I'm working with it. So soon as I smell it, I smell gas here, and it's part of me now. It's part of my daily, my daily living

pretty much. I work pretty much 6 days a week. So it's like human nature to me. So --

Q. You mentioned that there was a bypass.

A. Um-hmm.

Q. And the bypass was tied in from one main to the other main?

A. No. It's on the same main. So this is the main. So you have to cut out a section because this -- so this is the main, and this is the main here, and this is the stub. So in order to tie this pipe into this pipe, we cut off a section -- we cut off my (indiscernible) section. Now we 90 it over and 90 it, and tie it to this pipe. So there's a gauge at this end, this end, and a gauge on the plastic, on the tee. So you have a gauge here and a gauge here. And in between the gauges is your bypass.

Q. And you would -- so you were tying in the plastic to the --

A. Cast.

Q. -- to the cast iron?

A. Correct.

Q. And there was a gauge on the plastic?

A. On the plastic there's a gauge off of fuse tee. Comes out with a half-inch, no. It's a three-quarter-inch or one-inch, and it has a top on it, and on the top screw in the gauge, pressure gauge. And you have the two, one on each end of the main that we -- and then actually on the bags itself that have gauges, those gauges are for the pressure on the bag, not for the pressure of the gas.

Q. So you mentioned also that you were watching the gauges?
A. Yeah. As my co-workers either cutting or tapping. Once he drops the bags in, we start watching, making sure. Because the pressure, the pressure is the same once you put the bags in it pretty much blocks the main, and it's just running over the bypass. So once the bags are in, you want to make sure your gauges don't drop. It will pretty much say the gas isn't flowing through the bypass.
Q. Did you notice anything abnormal --
A. Not at all.
Q. -- about the gauges?
A. Not at all.
Q. At any point in time?
A. No.
Q. What about when the fitting came apart, the elbow?
A. The fitting came apart. That -- it was obvious to us in the hole and for the inspector and the foreman standing there it wasn't low pressure because it was screaming. And usually when there's just low pressure it's a -- it's very low compared to high pressure. The exact pressure that came out, I don't know, but I know it wasn't when we originally started working.
Q. Okay. So usually in a bypass you're going to have a valve somewhere to --
A. There's a valve on each side.

Q. Right. Before those valves were open, did anybody verify and document what the gauges were reading?
A. Yeah. The supervisor documents it, and he also prior to opening both sides of the bypass he purges out first. Because from each side, you know, because it has to be intact. The valves are closed. One valve is open, and it's purged. And then once that one is purged out, then the other side is tapped. That way there's no air pocket.
Q. Did they also take a reading and document what the pressure was on the plastic line?
A. I'm pretty sure he did, yeah. He, once he purged it out, after we shut the valve on the plastic to perform the cut for the tie-in the line is purged out the gas that's remaining in the stem, the stub that's sticking in the hole.
Q. Did you have any OQ training -- I'm sorry, operator qualification training, also known as OQ training, to make a determination of whether those gauges were normal or abnormal?
A. I'm not sure if I did any OQ specifically for gauges. But what I do know is those gauges were fairly new. They was just calibrated or recalibrated. I'm not sure. Usually, actually we got those gauges a week or two ago; 1 to 2 weeks ago, we had new gauges. They brought us out new gauges. Because we actually have auditors, like, last month or something, company-wide, and all our gauges everything was pretty much all new, everything.
Q. Was this the first time you have ever done a bypass tie-in?

A. No.
Q. Have you done those before?
A. Yeah, I -- when I -- as long as I started with Billy that's all -- that's what I've done for the past since I want to say May, May or June.
Q. Have they all been low to low?
A. All been low to low.
Q. You've never done a low to high or --
A. Never done a high. I've never worked -- the only time I've ever worked on a high pressure line was when I was with a different foreman, and we just did the surface, which is totally different. It was on steel, and it was a half-inch line, something like that. But I've never tied in any high pressure line at all.
Q. You mentioned before that there was another gentleman there by the name of Rob?
A. Yes.
Q. Was he working for Columbia gas?
A. He works for Columbia gas, correct.
Q. You don't know his last name?
A. I don't.
Q. Could you describe him?
A. Resembles you a lot.
MR. EVANS: Oh, yeah?
MR. MADERA: Yes.

MR. EVANS: There you go. Go look at me.

BY MR. WALLACE:

Q. Does he wear a Red Sox cap?

A. I don’t think he had a cap on. He had a vest on though. He has Columbia work vehicle. He arrived very fast on scene, and, you know, after when he arrived we was already evacuating. And he's, like, I need a group of people. We need to shut off some critical valves. And someone sent him the list of locations. And once I got to the location I was assigned to, I said, I'm here. I've located the critical valve gate box. And he was, like, all right.

And actually a Columbia guy was passing by, and I -- our inspector, he actually was running to the same location that I was. I drove there. He ran there. And he got there, and it was a Columbia truck passing by. We waved them down. Because the key I had originally took with me wasn't for the critical valve key. It's the plastic key. And shut it off. We recorded the time. And I called Rob, and I think a woman by the name of Veena. I called her back and said, you know, gas off as of 6:14 p.m. That was it.

Q. So Rob was not there when the bypass was opened up?

A. No. Rich was. Rich Padad he was there.

Q. When the valve initially was opened up on the bypass, what sound did it make?

A. A very low. Because usually when we purge it he's getting a reading, you know, after the present time, he's getting a reading on the gas and the pressure never dropped. And he usually tests it three times, if I'm not incorrect. He tests it three times, and makes sure it's 100 percent gas in the line. And once it's purged, and then the breakdown process begins. Once it's -- all the fittings are secured, everything has been tested for leaks, no leaks, then we break down the equipment.

Q. Was it similar to sounds that you had heard in the past --

A. Yeah, the normal sound.

Q. -- during low pressure tie-in?

A. Same sound as always. We didn't hear anything different. Only just when they was taking off that tee, which was --

Q. So the pipe didn't separate until you started loosening the attachment --

A. The pipe --

Q. -- the tee?

A. -- never separated. There's a SR-B seal that's wrapped around the pipe that we use as guidance to tap in. And then once it's tapped in, there's a plug put on, and the SR-B seal is for support being that the pipe was tapped in. So the seal holds it together. It's -- all the bolts on it are torqued by pressure by psi for pressure -- making sure nothing is leaking. We soap test everything. And then I write no leaks. Take it off, and you -- it has threads already for a plug, put a plug in. We test the

plug after that, make sure the plug is not leaking. All right, all set. And then we wrap them with primer first and then the Wax-Tape. And then we also put a Antileaks on the SR-B seals and on whatever coupling, you know, metal coupling.

MR. WALLACE: Okay. Thank you.

MR. MADERA: You're welcome.

MR. WALLACE: I have no more questions.

MR. NELSON: David Nelson, Columbia Gas.

BY MR. NELSON:

Q. Going back through the process you were going through, you said you took the gauge off, and then you unscrew the plug. Is that the correct order which you did it?

A. That's the order we -- because once you take the bypass off -- well, prior to taking the plastic tie-in piece off, you shut the valves.

Q. Okay.

A. So nothing is escaping.

Q. Yeah.

A. And once the bypass is off, we let it settle, make sure there's no change in the meters. We usually wait 15, 20 minutes. All right, gauge is still good. Nothing dropped. All right. Take off the tee.

Q. So you took off the tee before you took off the gauge?

A. No. He took the gauge off first. He was able to put the plug on.

Q. Okay.
A. And once start -- once, you know, just tie the plugs in, tighten it, all right. Once he's taken -- because, you know, once we cap that, we end cap that other one, that's dead. So we did the live side first, and once you put the plug in, start threading off the tee, and I have the plug, and he was like, you ready? I was, like, yeah. And when I went to put the plug it was --
Q. So how long after you removed the gauge did you remove the tee?
A. I want to say 3, 5 minutes, if it took that long to thread it in and soap test it real quick. And it wasn't much time at all.
Q. You said couple weeks prior for the gauges there was a auditor that came out. Do you know who those auditors worked for?
A. I'm not -- I don't know the -- oh, the auditors were from Columbia. It was two gentlemen. Maybe one was Mike. I'm not sure. I'm not even sure, to be honest. I didn't have much interaction with them. They sat there the whole time and observed.
Q. Thank you. Who normally watches the gauges?
A. Me. Well, pretty much everybody around the hole, but since I'm in the hole they're at eye level for me. And prior, prior to any step, our foreman usually asks the inspector, ready? Yep. Next step. Ready? Yeah. Next step.
Q. I'm sorry. One last question. You mentioned if there's a problem onsite the first person the inspector called, and there

was somebody else that he called. Do you know who he called after that?
A. I'm not sure who he called. I know he was trying to get -- he was calling someone, you know, what's going on, but I don't know exactly who he called or how many people he called.
Q. Okay. Thank you.
BY MR. EVANS:
Q. Okay. Just very few more questions, but the one thing -- so I may not have written it down, but I just want to make sure I understand this. When you heard the traffic going by, the emergency vehicles, right, sirens and stuff, and then you have the tee pop on you, you said 15 minutes, right?
A. Um-hmm.
Q. What do you think the time was when you actually the first time you read the gauges?
A. First time we read them was when we put them on, put them on 9, 9:30-ish. Well, after the break is when we started setup, and Matt put them in, I don't know, 9:20, 9:30, around there in the morning. They were put on before anything was even touched, cut and capped, anything. And it didn't seem abnormal with the sirens because if you live in Lawrence there's sirens going all day. So it was just another day in Lawrence to me. I didn't think anything abnormal. Only time I noticed that something was different was when I started seeing -- what already had -- what happened to us in the hole already had occurred. Then I start

seeing like, you know, Dracut and Brentwood, New Hampshire. And I'm, like, what's going on here? And that's when, you know, calls, people are yelling there's a house on fire over down the street. I'm, like, oh, yeah, we're standing there, and we're, like, oh, it's another house on fire. So but by that time we just -- my natural reaction was just immediate the houses there within on the street I was just running door-to-door just trying to get everybody out.

MR. EVANS: Okay. I think that's all I have. Thank you so much for coming in. It's been a very interesting interview. One of the most interesting I've heard in a long time. And I do appreciate you coming in, and we may actually have you in for a second interview.

MR. MADERA: All right.

MR. EVANS: But just so you know that it might -- that might happen.

MR. MADERA: All right.

MR. EVANS: Okay. Really appreciate it. Thank you so much.

MR. MADERA: No problem. My pleasure.

MR. EVANS: We learned a lot today.

Off the record with Jose Madera.

(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<br>SEPTEMBER 13, 2018<br>Interview of Jose L. Madera, Jr. |
| ACCIDENT NUMBER: | PLD18MR003 |
| PLACE: | Lawrence, Massachusetts |
| DATE: | September 16, 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.

[redacted]

Katherine Motley
Transcriber