

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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ALABAMA GAS CORPORATION (ALAGASCO) *

NATURAL GAS RELEASE WITH IGNITION * Docket No.: DCA-14-MP-001

BIRMINGHAM, ALABAMA *

DECEMBER 17, 2013 *

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Interview of: DAN INGRAM

Alagasco Headquarters
Birmingham, Alabama

Wednesday
July 16, 2014

The above-captioned matter convened, pursuant to notice.

BEFORE: MATTHEW NICHOLSON
Investigator-in-Charge

APPEARANCES:

MATTHEW NICHOLSON, Investigator-in-Charge
National Transportation Safety Board
Washington, D.C. 20594

RAVI CHHATRE, Accident Investigator
Pipeline Division
National Transportation Safety Board

BOB GARDNER, Director, Quality Assurance and Compliance
Alabama Gas Corporation (Alagasco)

KEITH BLACKWOOD, Pipeline Safety Investigator
Alabama Public Service Commission

REID CARPENTER, Esq.
(Representative on behalf of Dan Ingram)

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I N T E R V I E W

MR. NICHOLSON: Good morning. Today is Wednesday, July 16, 2014. My name is Matthew Nicholson, and I am an investigator with the National Transportation Safety Board in Washington, D.C. We are at the Alagasco headquarters in Birmingham, Alabama.

6 This interview is being conducted as part of an
7 investigation into the natural gas distribution release and
8 ignition that occurred in Gate City, Birmingham, Alabama on
9 December 17, 2013. This is case number DCA-14-MP-001. This
10 interview is being recorded and may be transcribed at a later
11 date. A copy of the transcript will be provided to the
12 interviewee for review prior to being entered into the public
13 docket.

14 Mr. Ingram, you are permitted to have one other person
15 present during these interviews. This is a person of your
16 choosing: supervisor, friend, family member, or no one at all.
17 Please state for the record who you have selected to be present.

18 MR. INGRAM: Reid Carpenter.

19 MR. NICHOLSON: Thank you. We'll now go around the
20 room. Each person state their name, with spelling, title, agency
21 and organization you are representing. I will start and we'll
22 proceed to my left.

23 Matthew Nicholson, M-a-t-t-h-e-w, N-i-c-h-o-l-s-o-n.
24 I'm an investigator with the NTSB.

25 MR. CHHATRE: Ravi Chhatre. That's R-a-v-i; last name

1 Chhatre, C-h-h-a-t-r-e. I'm an accident investigator, Pipeline
2 Division, NTSB.

3 MR. CARPENTER: Reid Carpenter, R-e-i-d, C-a-r-p-e-n-t-
4 e-r. And I am here for Dan Ingram.

5 MR. INGRAM: Dan Ingram, D-a-n, I-n-g-r-a-m, Alagasco,
6 construction journeyman.

7 MR. BLACKWOOD: Keith Blackwood, K-e-i-t-h, B-l-a-c-k-w-
8 o-o-d, pipeline safety investigator, Alabama Public Service
9 Commission.

10 MR. GARDNER: Bob Gardner, Director of Quality Assurance
11 and Compliance, Alagasco, and party representative.

12 BY MR. NICHOLSON:

13 Q. All right, Dan, just to begin with maybe give us some
14 background: how long you been employed with Alagasco, your
15 current title, and describe what it is you do in your current
16 role.

17 A. I've been with Alagasco about 9 years, a construction
18 journeyman. We go and repair leaks and do tie-ins.

19 Q. Repair leaks and perform tie-ins?

20 A. Yes, sir.

21 Q. Okay. And which division are you out of?

22 A. Metro.

23 Q. That's Birmingham Metro?

24 A. Yes, sir. Birmingham Metro.

25 Q. Okay. And we were -- we had just talked to another

1 gentleman that was a crewman and he was telling us that there's
2 two-man trucks and then there's crew trucks. Are you part of a
3 two-man truck or --

4 A. Four.

5 Q. You're four?

6 A. Yes, sir.

7 Q. Is that a crew truck?

8 A. Yes, sir, a crew truck.

9 Q. Okay, so who are the four persons that would be in that
10 truck?

11 A. It would be me, an assistant, and most of the time it's
12 newer guys on the truck, like in the back seat.

13 Q. And newer guys being new hires?

14 A. Yes, sir.

15 Q. Okay. And these guys are in training to become --

16 A. Yes, sir.

17 Q. What are they -- what will they be after they complete
18 their training?

19 A. They are -- they're still crewmen.

20 Q. Okay.

21 A. So they're just newer crewmen.

22 Q. Okay. And how long do they ride along with you until
23 they go to -- what do they go to after that? Assistant?

24 A. Well, they're still a crewman --

25 Q. Okay.

1 A. -- till they bid on an assistant job.

2 Q. Okay.

3 A. But most time it's either around 3 months.

4 Q. Okay.

5 A. Sometimes longer and sometimes shorter.

6 Q. So the time that -- the time they're spending with you
7 as a crewman, but not crewman assistant, is based on whether they
8 can bid for the assistant opening? Is there not a formal period
9 that you're training them before they are qualified?

10 A. Yes, sir. They go through assessments --

11 Q. Okay.

12 A. -- and we got a 30, 60, 90, and a 12-month assessment.

13 Q. Thirty, 60 -- day?

14 A. Yes, sir.

15 Q. Okay. And then at -- what did you say, 9 months?

16 A. Yes, sir.

17 Q. Okay. And what's involved in those assessments?

18 UNIDENTIFIED SPEAKER: You said -- I'm sorry --

19 UNIDENTIFIED SPEAKER: I think you said 12.

20 UNIDENTIFIED SPEAKER: -- (indiscernible) you said 9-
21 month assessment or 12-month assessment?

22 MR. INGRAM: We got a 30, a 60, a 90 --

23 BY MR. NICHOLSON:

24 Q: Oh, 90, I'm sorry. Okay.

25 A. Yes, sir.

1 Q. And then a 12 --

2 A. And then a 6-month.

3 Q. Okay.

4 A. And then a year. We just went to -- we used to just
5 have the 30, 60, 90. We just started this longer period.

6 Q. Started it when? Post-accident?

7 A. 2013. So around, around that time, yes, sir. It just
8 started.

9 Q. And, I'm sorry, that's the 6 and the 12 that you added?
10 The 6-month and 12 --

11 A. Yes, sir.

12 Q. Okay, so prior to the accident, prior to December 17,
13 2013, it was a 30-day, 60-day, 90-day assessment?

14 A. Yes, sir.

15 Q. Okay. Good. And then, as -- so what are the
16 assessments? What -- can you tell me what do you guys do in the
17 assessment?

18 A. We go over fittings, tools.

19 Q. Okay. As far as what? I guess, can you elaborate a
20 little bit more?

21 A. Oh, yes, sir.

22 UNIDENTIFIED SPEAKER: You to have to identify what --

23 MR. INGRAM: Yes, sir, they have to go through and name
24 all the -- pretty much everything we have on our truck.

25 BY MR. NICHOLSON:

1 Q. Oh, okay.

2 A. But the further -- the longer they're here, the more
3 they're -- the harder it gets.

4 Q. Okay.

5 A. And then the 30, 60 and 90, will take them all the way
6 up to like renewing services --

7 Q. Okay.

8 A. -- and the later ones are more into main installations.

9 Q. Okay, so you're actually assessing -- it's more than
10 them knowing fitting and tools --

11 A. Yes, sir.

12 Q. -- they actually have to perform work?

13 A. Yes, sir.

14 Q. And the journeyman, you, the senior person oversees
15 that?

16 A. Yes, sir.

17 Q. Okay. And how are you grading them or how's it --

18 A. We -- they go through an assessment at the end of each
19 month --

20 Q. Yeah.

21 A. -- or at the end of their 30, 60, 90, they go through an
22 assessment, and that's -- they get graded.

23 Q. So is that a paper test? Or is it you overseeing their
24 work?

25 A. I oversee their daily work.

1 Q. Okay.

2 A. And I show them what they -- what we're trying to teach
3 them.

4 Q. Okay.

5 A. And then they go have a guy give them a test.

6 Q. Okay, so it's a written test that they have --

7 A. Yes, sir.

8 Q. That's the assessment?

9 A. Yes, sir.

10 Q. Okay. Okay, good. One of the reasons we brought you
11 in, Dan, is to get idea of a typical leak call and how you guys go
12 about repairing it and documenting that. Can you just walk us
13 through a call-out on a grade 2 leak?

14 A. Say, it's in our box. We get there that morning.
15 They'll say, I put some more -- I put a leak in your box, a grade
16 2. So we get to the truck, they're getting the truck ready, and
17 we make sure we've got all of our stuff that we used the day
18 before replenished back on the truck.

19 Q. Okay.

20 A. And we'll look up the job, see where it's at. Then when
21 we get there, we'll turn the truck off and put our signs up and
22 call the radio room for a locate. If there's not one, one can
23 call.

24 Q. Um-hum.

25 A. Then we'll look it up on MAGI-Mobile to see where --

1 Q. Well, that's your mapping system, right?

2 A. Yes, sir.

3 Q. Okay.

4 A. And we'll see where the mains are supposed to be. So
5 then we'll get out and we'll start locating. We'll locate our
6 services and lines. Then we'll start bar testing. We'll bar test
7 over anything in that area. And then we'll see where the highest
8 readings is and that's where we'll cut a hole.

9 Q. Okay, and then from there, what do you --

10 A. We'll get it exposed and then we'll call for the dirt
11 truck to come pick up material and bring us fresh material to go
12 back in the hole.

13 Q. Okay.

14 A. And then we see what's leaking, whether it be a fitting
15 or, you know, something on the main.

16 Q. Um-hum.

17 A. And that's when we'll make repairs to it and then
18 backfill.

19 Q. Okay, repairs being clamps typically?

20 A. Yes, sir.

21 Q. Okay.

22 A. Yes, sir.

23 Q. So let's talk then, if it's a -- if you get in there and
24 you find corrosion on the pipe, can you kind of walk me through --
25 do you document the corrosion? What do you do?

1 A. We put it in our -- we got dropdown boxes in our ERMA
2 orders --

3 Q. I'm sorry, ERMA?

4 A. In our computer.

5 Q. Yeah, is that what it's called though, ERMA, is that the
6 system?

7 A. It's --

8 Q. MAGI and ERMA?

9 A. Yes, MOBLITE is what it is, MOBLITE.

10 Q. What is it?

11 A. MOBLITE.

12 MR. GARDNER: Okay, I can clarify that. First of all,
13 Dan is correct in what he -- everything Dan said is correct.

14 MR. NICHOLSON: Yeah.

15 MR. GARDNER: Our SAP system, our internal name for that
16 is ERMA.

17 MR. NICHOLSON: Oh, okay.

18 MR. GARDNER: Enterprise Resource Management
19 Application.

20 MR. NICHOLSON: Oh, ERMA with an "E", okay.

21 MR. GARDNER: ERMA. That's our SAP system. The RMS
22 system, the resource management system that allows them to know
23 which work to go to and document their work is called the RMS
24 system and it's also called MOBLITE, Mobile-Lite.

25 MR. NICHOLSON: Oh, MOBLITE, okay.

1 MR. GARDNER: Essentially, Dan, are you describing --
2 you have the computer in your vehicle --

3 MR. INGRAM: Yes, sir.

4 MR. GARDNER: -- and you're entering information about
5 the work, and it ultimately winds back up in the ERMA system or
6 the SAP system?

7 MR. INGRAM: Right.

8 MR. GARDNER: Okay, as a result of what they document.
9 The scheduling of the work is done and the dispatching, so to
10 speak, is done through the RMS or MOBLITE system.

11 MR. NICHOLSON: Okay.

12 MR. GARDNER: But it's all integrated -- when they
13 capture results in the field, it's captured in the RMS system and
14 then it's moved over to the SAP system where we ultimately -- or
15 the RMS system, where we -- we have our acronym -- you have your
16 acronyms, we have our acronyms.

17 MR. CHHATRE: Yeah, I'm sorry, I --

18 MR. GARDNER: And I'd be glad to clarify that if --

19 MR. CHHATRE: Yeah, I think maybe you even more --
20 confused even more with all the other acronyms. Okay, do you mind
21 explaining like SAP, ERMA, Mobile-Lite, RMS? How does that even
22 work? I mean --

23 MR. GARDNER: Okay.

24 MR. CHHATRE: You got it?

25 MR. NICHOLSON: Yeah, I got it.

1 MR. CHHATRE: If you got it, then there's no need to
2 explain.

3 MR. GARDNER: SAP, S-A-P, is our -- you want me to do
4 this now, or I'll do it later?

5 MR. CHHATRE: If he's got it, no need to -- if you've
6 got it, there's no need to. If you got it, no need to.

7 MR. NICHOLSON: Bob, why don't you do it? It'd be nice
8 to have it on the record, though.

9 MR. GARDNER: The SAP system we installed in 2003.

10 MR. CHHATRE: Okay.

11 MR. GARDNER: And it has different components, it has --
12 we refer to it, our inside the company name for our SAP system is
13 ERMA, the Enterprise Resource Management Application. And we have
14 the ability to do and document our maintenance work, our capital
15 work, our material management, all of our financials, and our
16 human resources. Our time entry is all embedded in an SAP module,
17 our big picture SAP individual modules that we've implemented over
18 time.

19 In 2012, for the kind of work Dan does, we also
20 implemented an RMS, or resource management system. It is a
21 dispatching and scheduling module separate from SAP but integrated
22 with SAP, such that we now send work to laptops in vehicles for
23 people like Dan and his counterparts. That gives them, instead of
24 a paper work order, it gives them work based on their skill set
25 and their territory, their availability. It routes that -- it

1 gives them that work, then they complete the work electronically
2 and the results ultimately wind up in our SAP or ERMA system, as
3 opposed to having a paper work order that has to be keyed into
4 ERMA.

5 We were taking the paper work orders, pre-RMS, filling
6 those out in the field -- create the order, if possible, printing
7 it, handing it off to the person that did the work, they handwrote
8 information on it and turned it back in to somebody who typed it
9 in the computer. Now all of that is done electronically, except
10 in extreme cases where they might not have a paper order in
11 advance or -- we may go to a grade 1 leak and create something
12 after the fact if that's necessary. But at the end of the day, we
13 have a -- really, the RMS system, or MOBLITE is another name for
14 that, right.

15 MR. NICHOLSON: So that's where your work order comes
16 out of?

17 MR. GARDNER: Right, right.

18 MR. NICHOLSON: Okay.

19 MR. CHHATRE: So, RMS and Mobile-Lite are the same?

20 MR. GARDNER: Yes. ERMA and --

21 UNIDENTIFIED SPEAKER: SAP and ERMA are the same.

22 MR. CHHATRE: Is same. Okay.

23 MR. GARDNER: And they talk to each other.

24 MR. NICHOLSON: But when you're putting the information
25 in about the pipe, the corrosion, that's going into ERMA?

1 MR. GARDNER: It's really going into RMS.

2 MR. NICHOLSON: It does go back in ERMA, but they're
3 integrated, so --

4 MR. GARDNER: But it goes into the -- it winds up in the
5 -- some stuff stays only in RMS, but --

6 MR. NICHOLSON: Oh, okay.

7 MR. GARDNER: -- the data that we used to capture in
8 ERMA now gets into ERMA by way of the entries they do when they
9 have the computers in their trucks.

10 MR. CHHATRE: Okay, thanks. Wow.

11 MR. NICHOLSON: All right. Back --

12 MR. GARDNER: Does that help you?

13 MR. CHHATRE: Yeah.

14 MR. NICHOLSON: No, that's -- that is (indiscernible) --

15 MR. GARDNER: Is that accurate, Dan?

16 MR. INGRAM: Yes, sir.

17 MR. GARDNER: Is it? Okay. Just want to make sure I'm
18 not missing anything. It can be tricky but we --

19 MR. CHHATRE: Yes, I know. That helped.

20 BY MR. NICHOLSON:

21 Q. Okay, we were back -- we wanted to kind of discuss
22 corrosion. Just walk us through, you've exposed the pipe, you see
23 corrosion, you know, what do you do at that point? What kind of
24 things are you assessing on the RMS and how are you correcting --

25 A. Well, if it's -- we'll put a wraparound on it. If it's

1 something on a fitting, we'll replace the fittings. You talking
2 about when I'm filling out my --

3 Q. Yeah, I want to back up a little bit. Because before
4 you had to put a wraparound, break it down, all right? I mean,
5 you're going to file it down, right?

6 A. Yes, sir. We'll soap it and see where the leak is, yes,
7 sir. Then we'll file it, we'll file it down. We'll mark where
8 the leak is.

9 Q. Do you photograph it at all?

10 A. No, sir.

11 Q. The corrosion? No? Okay.

12 So you soap it, you file it down, then -- the filing
13 down is for the clamp?

14 A. Yes, sir.

15 Q. Okay.

16 A. Then we'll install a clamp.

17 Q. What about -- when do you -- we know at some point you
18 have to document the corrosion, right? On ERMA?

19 A. Yes, sir.

20 Q. Or, I mean, MOBLITE.

21 A. Yes, sir. That's when we -- we start back-filling.
22 Once we get the leak repaired, when I get in my truck, I start
23 filling out --

24 Q. Okay.

25 A. Yes, sir.

1 Q. Okay, and that's -- what do you do to assess the
2 corrosion? I mean, that's after you've milled it down, or --

3 A. Yes, sir. Once we file it down, we'll see what size
4 clamp we're going to need. We got longer and shorter clamps.

5 Q. Okay.

6 A. So we'll take the size of the pipe and see what size
7 clamp we need. We'll install it. And we uncover the whole main
8 and then we'll punch back both ways and block it up --

9 Q. Okay.

10 A. -- and put mastic on all the bolts.

11 Q. Um-hum. Okay. I want to go back to the corrosion part
12 then. Do you know the difference between graphitic corrosion and
13 general corrosion? Is that something you put on this RMS sheet?
14 Do you categorize that?

15 A. We have a: no corrosion, mild corrosion, and severe.

16 Q. Okay.

17 A. Yes, sir.

18 Q. Which one's graphitic?

19 A. Graphitics?

20 Q. Yeah. Do you -- graphitics -- do you the difference --
21 do you look for graphitic corrosion on the pipe specifically?

22 A. Is that severe corrosion?

23 Q. I'm asking you? I don't know.

24 A. Graphitic?

25 Q. That's a selective corrosion. I guess -- so on the

1 sheet, all you have is corrosion?

2 A. Yes, sir.

3 Q. And then severity of the corrosion?

4 A. Yes, sir.

5 Q. Okay, okay. When you're filing it with the mill file,
6 is that -- that's to take off dirt and debris?

7 A. That's to smooth it, yes, sir. Smooth it up so we can
8 install the clamp.

9 Q. Okay.

10 MR. GARDNER: Are you referring to cast iron or steel
11 pipe?

12 MR. NICHOLSON: We are only talking cast iron here.

13 MR. GARDNER: Okay. We should clarify that then.

14 MR. NICHOLSON: All right. That's right. We're mostly
15 concerned with cast iron --

16 MR. INGRAM: Okay.

17 MR. NICHOLSON: -- because that's what the accident pipe
18 was.

19 BY MR. NICHOLSON:

20 Q. So, then I'll go back. When you're looking at cast iron
21 pipe and you're assessing it on the RMS sheet, is there a spot in
22 there for graphitic corrosion versus general corrosion?

23 A. No, sir.

24 Q. Okay. So what are your options for documenting
25 corrosion?

1 A. It's no corrosion, mild or severe.

2 Q. Okay. So, three options, roughly?

3 A. Yes, sir.

4 Q. Okay.

5 A. And then the spread.

6 Q. Okay. And what are your options there? Or is it an
7 option -- do you just write it in, or?

8 A. No, sir, it's a dropdown menu.

9 Q. Oh, okay.

10 A. It's the same: no, mild and extensive.

11 Q. Okay. And can you just tell me -- give me some
12 examples. What would be a mild and what would be extended?

13 A. If we had one corrosion hole and it was just a small
14 leak, just barely bubbling when we soap it, then we would put
15 mild.

16 Q. Okay.

17 A. And if it was just one, we would put mild, again. And
18 then if it was a severe -- a big, just one, but it was a big leak,
19 we put extensive. And then if it was more than one, we would put
20 extensive but put -- if it was more than one wraparound, we'd put
21 extensive and extensive in both boxes.

22 UNIDENTIFIED SPEAKER: Yup, both dropdown boxes.

23 BY MR. NICHOLSON:

24 Q. Extended or extensive?

25 A. Extensive.

1 Q. Is that one of the options in the box? Yeah, okay, I
2 wrote extended. Extensive, okay.

3 And what if you find a crack in the corrosion, a
4 longitudinal crack? Is that documented, or --

5 A. We would put it in our -- we've got a place where we can
6 type in what we done.

7 Q. Okay.

8 A. We would put something -- repaired crack.

9 Q. Okay. So there's no dropdown --

10 A. No, sir.

11 Q. -- different than the corrosion? Okay.

12 MR. NICHOLSON: Okay, Ravi?

13 BY MR. CHHATRE:

14 Q. Okay. For the, I guess leak repairs, do you have a
15 pretty formal shift schedule or do you have like only during the
16 daytime?

17 A. I work day shift.

18 Q. No, but, I mean, for Alagasco company. Do you have
19 people going in the evening or going at night to fix leaks, grade
20 2 leaks?

21 A. I believe the grade 2's are fixed during the day.

22 Q. Okay.

23 A. And our late shift is for grade 1's.

24 Q. Grade 1 only?

25 A. Yes, sir.

1 Q. Okay. So grade 2, grade 3 -- do you ever go to fix
2 grade 3 leaks? Or grade 3 leaks are really not --

3 A. We have, but that's just -- most of the time it's
4 something real, real, real small, and we'll clear them up.

5 Q. Okay. You are with the company for a long time. Do you
6 recall ever going to fix a grade 3 leak on your work shift?

7 A. No, sir. Not on our -- not since we've been doing the
8 new stuff.

9 Q. How about old stuff? I mean, before the accident,
10 before your ERMA and Mobile-Lite came in the picture? I guess,
11 what I'm asking you, through your entire career of 9 years with
12 the company, do you recall going with a work order to fix a grade
13 3 leak?

14 A. When I was a crewman, we would go out and something real
15 small that they'd been there, you know, a little while and they
16 wanted to clear up everything, we would -- yes, sir.

17 Q. Okay. Now, when you go to fix a -- and just for
18 clarity, I'm only talking about the cast iron pipe and I'm only
19 talking about pre-accident. So, ignore post-accident scenario.

20 A. Right.

21 Q. So when you go to fix a leak, you start locating the
22 main?

23 A. Yes, sir.

24 Q. Do you ever go to these properties near the leak first
25 to see if the gas has gone to the homes or near the homes or near

1 the foundation?

2 A. We bar test all four corners when we go out to a leak.
3 We'll have a guy -- he'll start bar testing on the -- we'll bar
4 test the main and all of the services around all the houses
5 around.

6 Q. Okay.

7 A. Like if the leak's here and if it's in front of this
8 house, we go to this -- we bar on this one, this one, this one and
9 this one, all the adjoining property lines.

10 Q. And that is done before you locate the main? Or when
11 that is done in the process?

12 A. That's when we -- once we locate.

13 Q. Okay. So before you start excavating, you look for the
14 foundations?

15 A. Yes, sir.

16 Q. And what happens if you see some readings near the
17 foundations?

18 A. We would get the people out of the houses.

19 Q. Okay.

20 A. And then we'd call our supervisor and tell him, hey --

21 Q. And what is the trigger for that? At what level of gas
22 you will do that?

23 A. Any gas at my foundation would.

24 Q. Any gas near the foundation?

25 A. Yes, sir.

1 Q. Okay. And do you document those readings then, near the
2 foundation, in your dropdown Mobile-Lite, or --

3 A. Well, if it's something severe like that, we would be --
4 we're on the scene, so we're going to fix it before we leave.

5 Q. But as a procedure, are you required to document that,
6 yes, at this particular jobsite I went, we looked at the homes --
7 and I'm not saying there are homes all the time --

8 A. Yes, sir.

9 Q. -- but assuming there are homes, and that we looked at
10 these four corners of the property and the reading was 0 or a
11 reading of 2 percent LEL?

12 A. We would if we -- if we was on a grade 2 leak and maybe
13 we had another grade 1 that come in and they wanted us to leave,
14 before we can leave, we punch by all the foundations and
15 everywhere before we can -- before we can do anything. To make
16 sure that, you know, that there's nothing there.

17 Q. Right.

18 A. To make sure it's a grade 2.

19 Q. No, but my question is not if you are leaving. My
20 question is when you go to a site to fix a grade 2 leak --

21 A. Yes, sir.

22 Q. -- does your dropdown menu and procedure require you to
23 document that you guys went, looked at the properties and the
24 reading at the properties were such and such.

25 A. We don't have no dropdown.

1 Q. Oh, okay. It's not required. So it's like a procedure
2 you guys do, but it's not really required procedure?

3 A. Yes, sir. Yes, sir.

4 Q. Okay. And when -- are you called to fix the leaks on
5 the service lines also or only the mains?

6 A. Both.

7 Q. Both?

8 A. Yes, sir.

9 Q. Okay. And how do you fix the leaks on the service?

10 A. Most of the time, we renew them. We'll install a new
11 one.

12 Q. So --

13 A. If it's a bare steel line, then we either push plastic
14 through that one or we open ditch it, to put a new one in.

15 Q. Newer one in.

16 A. Yes, sir.

17 Q. Abandon the leaky one?

18 A. Yes, sir.

19 Q. Okay. Now, going back to corrosion, how did you learn
20 to identify no corrosion, mild corrosion or extensive corrosion?
21 Who taught you these things?

22 A. OQ and I guess just on-the-job training.

23 Q. Okay. Were you given any corrosion -- did you have any
24 corrosion required, like in any course offered by NACE or any
25 corrosion specialists in this area to identify the grade of the

1 corrosion?

2 A. Do we -- can you repeat that one more time?

3 Q. Okay, sure. Are you given any formal training in
4 corrosion, besides OQ?

5 A. Just on the job, besides OQ.

6 Q. Okay. Okay. And in your 30, 60 and 90-day evaluation
7 of the people, are there questions about corrosion?

8 A. They will know what corrosion is.

9 Q. No, that's not the question. The question is -- I guess
10 what I'm trying to find out, in your evaluation procedure, 30, 60,
11 and 90-day, you said, and I think you told us that there's a
12 written test?

13 A. We'll ask them what they think it is. If it's a -- how
14 bad it is, or if it would be, you know, severe, mild or -- the
15 guys on my truck I ask what would you think that right there is
16 going to be?

17 Q. Okay. And are you familiar with various forms of
18 corrosion that can happen on a cast iron pipe?

19 A. Atmospheric.

20 Q. Are you familiar with the graphitic corrosion?

21 A. Sir?

22 Q. Are you familiar with the term graphitic corrosion on
23 cast iron? Graphitic.

24 A. No, sir.

25 Q. Okay. Are you familiar with cracks? Do you know how to

1 look for the cracks in the cast iron pipe?

2 A. Besides -- well, once we file it, we'll take a look at
3 it, you know, visual inspection, and we soap it.

4 Q. Okay.

5 A. Yes, sir.

6 Q. Now, do you have -- in your toolbox, do you have any
7 devices that you can look at the crack, like magnifying glasses?
8 Those cracks sometimes can be very, very fine.

9 A. No, sir, we got -- we have some mirrors.

10 Q. Okay.

11 A. That we can -- we run around it, yes, sir.

12 Q. Okay. But nothing you guys -- okay. And do you have
13 some type of pamphlet in your brochure instructions that says the
14 pipe should be cleaned to this extent before you put the clamps
15 on, or are you just going on experience only?

16 A. Yes, sir.

17 Q. Experience only.

18 A. Yes, sir.

19 Q. And have you gone to any location where the previous
20 clamp or previous fix you have on a leak there that you re-fix it,
21 I guess, or redo it?

22 A. I have, but very rare.

23 Q. Very rare. Do you guys ever have any interaction with
24 your corrosion mechanics in the company?

25 A. We have a corrosion department and I've -- lots of

1 times, say we put something on a coupling, we'll put a anode on
2 it, if it's on cast iron. We want to protect that coupling, so we
3 put anodes on. And we'll call and lots of times they'll come out
4 and see where we put it and then they'll document it towards that.

5 Q. Um-hum.

6 A. So --

7 Q. And that could be like zinc or magnesium?

8 A. Yes, sir. It's magnesium.

9 Q. Magnesium. Okay.

10 A. Yes, sir. We put 50-pound anodes --

11 Q. Okay.

12 A. -- or they're 17-pound anodes, is what they are, but
13 they weight about 50 pounds.

14 Q. Okay.

15 A. They're big.

16 Q. Yeah, to be safe.

17 A. Yeah, they're -- we have -- on our sheet, we'll put that
18 we put an anode on it. And the 17-pound anodes are the big, big,
19 big anodes, and I'll tease the guys -- we call them 17-pound
20 anodes, but they're actually about 50 pounds.

21 Q. Yeah.

22 A. Yeah, with all the powder and magnesium on them.

23 Q. Yeah. Very good. (Indiscernible), so --

24 A. Yes, sir.

25 Q. And you have done that? You've installed anodes?

1 A. Yes, sir. Yes, sir.

2 Q. Now, I understand that corrosion mechanics meet more
3 often by themselves. Are you guys invited to go or you guys are
4 encouraged to attend those meetings with the corrosion mechanics?

5 A. Meetings?

6 Q. Yeah. Attend meetings, I guess, to information
7 exchange, what I was told. The corrosion mechanics as a group
8 gets together several times a year. Now, at your level, since you
9 are teaching the new people, are you invited to attend those?

10 A. I haven't been to a corrosion meeting.

11 Q. Okay. But you have been to corrosion meetings?

12 A. I have but not --

13 Q. Not at work?

14 A. Yeah.

15 Q. Which meetings you attended?

16 UNIDENTIFIED SPEAKER: I'm sorry, I thought he said, I
17 have not been to one of those meetings.

18 MR. CHHATRE: Oh, Okay.

19 BY MR. CHHATRE:

20 Q. Oh, you have not been?

21 A. I've been with the corrosion department to go work with
22 corrosion.

23 Q. Okay.

24 A. But not to like a meeting.

25 Q. Okay. Thank you. Thanks, that's all I have.

1 MR. NICHOLSON: All right, thank you much. Keith?

2 BY MR. BLACKWOOD:

3 Q. I do have one. Like when you expose the main before you
4 start filing it off, do you denote salt conditions or ground water
5 present or anything in the area, in the ditch, that might enhance
6 corrosion? Because I know when you have a leak, a lot of times
7 you're going to have a dirt ball there.

8 A. Yes, sir.

9 Q. And it's either going to be hard or, depending on how
10 long it's been there, it's --

11 A. We don't document it, but I mean, we may put it in our
12 notes. There's not a dropdown box.

13 Q. Okay.

14 A. But I show the guys that, hey, look, you know this right
15 here? See the soil right here? This would be soil where you know
16 it'll be -- we find it's dry right here, you know, so we're close
17 to the leak. Or sometimes it'll be dry right around a leak.

18 Q. And can you speak to -- I know Matt may have already
19 asked this question, but can you speak to you go out and you
20 expose a main that's good, with no corrosion, versus one that is
21 what I would call eat up or maybe mild to severe corrosion. Can
22 you explain the difference between the two in cast iron -- or, I
23 don't -- that may be a hard question. But can you kind of talk us
24 through what you would see on a piece of what I would call good
25 pipe versus a piece that is mild to severe?

1 A. Okay. Say, we're going to a new installation to where
2 we have to actually dig up the main and tap it and put a new
3 service on, you know, there wouldn't be -- there's not a leak in
4 the hole. So, you know, we go over, steel punch it back both
5 ways, looking for anything. But we'll file it down to where we're
6 going to put our hole in the main at to hook the service up to,
7 and that's what -- I'll show them, hey, this is good main right
8 here, you know, it's smooth, you don't see no -- it ain't real
9 scaly, you know, when we filed it, a lot of stuff didn't come off
10 of it. You know, there's no pits.

11 Q. That's what I was looking for right there about the
12 difference in the scale and stuff. Because I know some of the
13 stuff we saw out there on the scene, some places were good and
14 some places had a lot of that scale. That's what I was trying to
15 hit on there so you can kind of clarify that scale portion. So,
16 that's what I was kind of looking for. Thank you.

17 A. All right. You're welcome.

18 MR. NICHOLSON: Is that it?

19 MR. BLACKWOOD: Yes, sir.

20 BY MR. NICHOLSON:

21 Q. All right, I've got a few. I didn't hear, Dan, when you
22 expose the pipe to do your corrections, your fixes, how much of
23 the line is exposed? Is there a standard?

24 A. We usually, according to how deep it is, we'll cut a 4
25 by 4; 4 by 5 hole.

1 Q. Okay, that's typical?

2 A. So, 4 to 5 feet.

3 Q. Yeah, 4 long or wide?

4 A. We try to go 4 wide and then we'll go 5 long.

5 Q. Okay. Here's a hypothetical: You've found your leak by
6 bar testing, right? You dig down. Your leak is at a fitting,
7 coupling, but you notice back a-ways you see corrosion on the
8 pipe. Is that documented on your sheet, even though the leak is
9 up at the fitting and you're repairing something around the
10 fitting, but you've observed corrosion elsewhere, is that
11 documented?

12 A. Yes, sir. In our dropdown box, we'll put -- and then I
13 also -- we'll note it on our notes.

14 Q. Okay.

15 A. But the dropdown boxes is severity and spread.

16 Q. Right.

17 A. So we would put -- you know, if we see a lot of pits in
18 the main, we'll put severe.

19 Q. But this is in a case where your actual leak correction
20 is, you know, farther down, like maybe a fitting, and you just
21 happen to uncover some corrosion on the body of the pipe in the
22 process of fixing the leak over here.

23 A. Okay.

24 Q. You'll still document that there was corrosion on a
25 line?

1 A. Corrosion on the main?

2 Q. Yeah, corrosion on the main. Right.

3 A. We'll put it in our long text.

4 Q. Okay.

5 A. We'll put, you know, made a repair on coupling, main
6 corroded.

7 Q. Okay. So it does get captured -- if you see it, it gets
8 captured?

9 A. I'd write it down, yes, sir.

10 Q. You would -- would a junior member know to do that?

11 A. If they was on my truck and they come up and look.

12 Q. Okay.

13 MR. GARDNER: So you would typically fill out the
14 information; is that not correct?

15 MR. INGRAM: Yes, sir.

16 BY MR. NICHOLSON:

17 Q. Not a junior crewman?

18 A. No, sir.

19 MR. GARDNER: It's always the journeyman in the truck.

20 MR. INGRAM: Journeymen, always journeyman. The
21 journeyman (indiscernible).

22 BY MR. NICHOLSON:

23 Q. Okay, and do you guys ever rotate divisions? I know you
24 said you're Birmingham Metro. Do you ever go to Western or
25 Southern? Do they rotate you? I mean, previous to --

1 A. No, sir, I stay in that truck.

2 Q. Okay.

3 A. That's how I hired on. I ain't never been nowhere else.

4 Q. And I think Ravi was trying to allude to information
5 sharing. You don't meet -- the three divisions of Birmingham
6 never get together: Western, Southern, Metro, and --

7 A. No.

8 Q. -- discuss -- okay.

9 MR. GARDNER: Are you asking if his counterparts meet?

10 MR. NICHOLSON: Yes.

11 MR. GARDNER: Are you asking do the management, et
12 cetera --

13 BY MR. NICHOLSON:

14 Q. No. Your counterparts. At your level. Do you get with
15 the other journeymen from the other divisions and share?

16 A. Not unless we meet on a, like a leak late at night or
17 something, if they need some help.

18 Q. Okay.

19 A. Other than that --

20 Q. There's no annual meeting of the journeymen --

21 A. No, sir.

22 Q. -- construction team? Okay.

23 MR. NICHOLSON: Okay, I think that's -- that's all I
24 have. Ravi, anything else?

25 MR. CHHATRE: No follow-up. Thank you.

1 MR. NICHOLSON: Okay. At this point I guess we'll end
2 the interview. Off the record.

3 (Whereupon, the interview was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALABAMA GAS CORPORATION (ALAGASCO)
 NATURAL GAS RELEASE WITH IGNITION
 BIRMINGHAM, ALABAMA
 DECEMBER 17, 2013
 Interview of Dan Ingram

DOCKET NUMBER: DCA-14-MP-001

PLACE: Birmingham, Alabama

DATE: July 16, 2014

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.

Valerie Grieder
Transcriber