

National Transportation Safety Board Washington, D.C. 20594

Name: Tammy Espinoza		
Department Atmos Energy / Mid-Tex Technical Services		
Title: Director of Asset Management		
Date of Interview: April 25, 2018		

I have reviewed my transcript(s) from the above referenced accident and:

I have no comments to make. My comments are submitted herewith. My comments are marked on the attached copy. х

UNITED STATES OF AMERICA NATIONAL TRANSPORTATION SAFETY BOARD * * * * * * * * * * * * * * * * * * Investigation of: * * * NATURAL GAS-FUELED EXPLOSION OF * Accident No.: PLD18FR002 RESIDENCE, DALLAS, TEXAS * FEBRUARY 23, 2018 * * * * * * * * * * * * * * * * * * Interview of: TAMMY ESPINOZA Marriott Courtyard Hotel Plano, Texas Wednesday, April 25, 2018

APPEARANCES:

ROGER EVANS, Investigator in Charge National Transportation Safety Board

JIM COLLINS, Regional Manager Railroad Commission of Texas

JOHN McDILL, Vice President of Pipeline Safety Atmos Energy

CHRIS McLAREN, Distribution Integrity Management Program Coordinator

Pipeline and Hazardous Materials Safety Administration (PHMSA)

THOMAS TOBIN, Attorney Wilson Elser (On behalf of Ms. Espinoza)

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1	INTERVIEW
2	(12:40 p.m.)
3	MR. EVANS: On the record with Tammy Espinoza.
4	Good afternoon. Today is April 25, 2018. It is now
5	12:40 p.m. My name is Roger Evans. I'm with the National
6	Transportation Safety Board. I'm a senior pipeline investigator
7	with the pipeline accident investigation group out of Washington,
8	D.C. For this accident I'm the investigator in charge. We're at
9	the Marriott Courtyard Hotel in Plano, Texas.
10	This interview is being conducted as part of the
11	investigation into the fatality home explosion that occurred on
12	situated February 23, 2018, in a west Dallas suburb situation just north of
13	Love Field. The NTSB case number for this accident is PLD18FR002.
14	The purpose of the investigation is to increase safety, not
15	to assign fault, blame or liability.
16	This interview is being recorded and may be transcribed at a
17	later date. A copy of the transcript will be provided to the
18	interviewee for review prior to being entered into the public
19	docket.
20	Ms. Tammy Espinoza, please provide the spelling of your name,
21	the company you work for and your job title.
22	MS. ESPINOZA: My name is Tammy Espinoza, and you spell that
23	T-a-m-m-y, E-s-p-i-n-o-z-a. I'm the Director of Asset Management
24	for the Atmos Mid-Tex Division.
25	MR. EVANS: Okay. And you are permitted to have one other

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1 person present during the interview. This is a person of your 2 choice -- supervisor, friend, family member or nobody at all. 3 Please state for the record who you have selected? 4 MS. ESPINOZA: Tom Tobin. MR. EVANS: Okay. And, Mr. Tobin, can you please, for the 5 6 record, give us the spelling of your name and your affiliation? 7 MR. TOBIN: My name is Thomas Tobin, T-o-b-i-n. I'm an attorney with the Wilson Elser law firm in New York. 8 9 MR. EVANS: Okay. I'd like to go around the room and have 10 everyone state their name and their title and agency or 11 organization that they represent. 12 MR. COLLINS: Jim Collins, J-i-m, C-o-l-l-i-n-s, regional manager for the Railroad Commission of Texas, Dallas-Fort Worth. 13 14 MR. McDILL: John McDill, M-c-D-i-l-l, Vice President of 15 Pipeline Safety for Atmos Energy, Dallas, Texas. 16 MR. McLAREN: Chris McLaren, C-h-r-i-s, M-c-L-a-r-e-n, PHMSA 17 DIMP Coordinator, Houston, Texas. 18 MR. EVANS: Thank you. 19 Thank you, Tammy, for allowing us to interview you today. INTERVIEW OF TAMMY ESPINOZA 20 21 BY MR. EVANS: We're going to start out with just some background 22 Ο. 23 information. Just to begin with, we'd like to know your education 24 level and just your majors and, you know, PE license or whatever 25 you have. Just give us an idea what that is.

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1	A. Sure. I have a Bachelor of Science Degree in Civil
2	Engineering from Texas A&M, a licensed PE in the State of Texas.
3	Q. Okay. And I see from this org chart here
4	A. Yes.
5	Q that you have five reports. So before we go on to this
6	though, I'd like to get the how long you've been with the firm.
7	A. I've been with Atmos a little over 5 years now.
8	Q. Okay. And your 5 years, can you give us a rundown of the
9	positions you've held and responsibilities and that type thing?
10	A. Sure. I started off as an engineer. I think they changed
11	the titles a little bit. It was Engineer I or Engineer III, but I
12	started off as an engineer, designing and managing projects, and
13	then I moved to senior engineer. And then from there, an
14	engineering manager of the system planning team, and then director
15	of asset management.
16	Q. Okay. So an engineer, senior engineer. What was the next
17	one? I'm sorry.
18	A. Engineering manager for the system planning [team].
19	Q. System planning.
20	A. Um-hum.
21	Q. Okay. And how long have you been in your current role?
22	A. About a year and a half.
23	Q. Okay. So go back through your previous experience, like on
24	the planning side, what were you doing?
25	A. I was the manager of the planning team. So it's actually

1	if you look at the org chart you have right there, that's the role
2	Guilford that John Gilford is in right now.
3	Q. Oh, okay. Okay. Great.
4	A. So he's got an engineering manager. It should be seven
5	direct reports. So I managed that team before coming into that
6	director role.
7	Q. Okay, okay. Great. So and then the number in
8	parentheses, is that how many reports that person has?
9	A. Correct.
10	Q. Okay, okay. Great. So just briefly explain kind of how
11	what your job is and how your reports, what they do, if you can
12	kind of, in a summary kind of level, give us an idea of how that
13	all works?
14	A. Sure. I'll talk through it a little bit. So you see Terry
15	Shuck there. He's the he manages our pressure control.
16	Q. Yes.
17	A. And so that's a 24/7 operation. They're looking at pressures
18	on our system. So he manages that team, and they're located in a
19	separate office from where the rest of us are at Lincoln Center.
20	And then John Gilford manages the system planning team.
21	They're responsible for pipe sizing, making recommendations to the
22	system. So whenever whether it's growth or whether it's
23	replacements or a long-term strategy, so they're looking at the
24	system as a whole. And they'll work with Terry Shuck sometimes if
25	there's winter pressure issues; what are the pressure issues, how

1 do we make improvements.

2 Q. Okay.

A. And then they also work with Andrew Marshall's team incorporating some of the risk information into some of the recommendations for replacement projects. So -- and then hopefully Andrew spoke to you a little bit about what his team does, but they're generally doing most of the risk modeling for [Mid-Tex] the corporation.

9 And so then after that, you see those two asset planning 10 specialists. They are managing our budgets and analyzing our 11 budgets. So they work a lot with the planning team as well as 12 with myself. So they report directly to me. They don't have a 13 manager in between myself and them.

14 Q. Okay. And just a question about Mr. Shuck there. Does he 15 also deal with the quality of the gas as far as the additions and 16 subtractions of what they might add to the gas?

17 A. No. He's purely looking at pressures and monitoring

18 pressures.

19 Q. That person's not part of your world?

20 A. No.

Q. Okay. Good enough. Okay. So we understand that Andrew comes up with the risk model.

23 A. Correct.

Q. And then there are all sorts of decisions to be made based on what the models tell you, correct?

1 A. Right.

2 Q. So if you can give us just a run-through, a summary of how3 that part of your world operates.

4 A. Okay. I'm trying to think about the best way to paint the5 whole picture.

6 Q. That's okay.

7 A. So the big picture. We talk about risk on the system and
8 replacing that risk, and that's what you're trying to get at, is
9 how we make decisions around replacing risk.

10 Q. Yes. Right.

A. So we've got a lot of different project types for driving risk out of our system, right. So part of the responsibility that I have with those asset planning specialists and planning, and Andrew, is to look holistically about how we drive risks out of our system with the dollars that we have.

16 So there's a variety of project types that drive that risk 17 out of the system, and some of them are long-term, strategic 18 planned projects, and some of those are projects that are not 19 known about until more immediate concerns drive them, right. 20 Operations calls and says we have this need, this desire.

So I'll talk with you a little bit about some of the projects that are known and kind of the risks around those and hopefully that will answer your question. Is that the direction you're wanting to --

25 Q. That sounds good.

A. Okay. So, you know, I know Andrew probably talked in depth
 about our Optimain model. Did he talk with you about that?
 Q. Yes.

A. Okay. So I'll talk with you about those different kind of project types and it includes Optimain. So we've got -- so I look holistically about driving out risk. Cast iron presents a risk. So we've got a dedicated cast iron replacement. So we're replacing cast iron. We've replaced -- we've driven down from 800 miles to 500 miles, and we're going down from 500 to zero in the next 5 years. So that's one way we're driving out risk.

11 And then what Andrew probably talked with you about is our 12 Optimain part of the puzzle, and that's another way we're driving 13 out risk, is the analysis that he does with those Optimain 14 projects, and then deciding to replace the above-average projects, 15 the relatively high risk projects, high relative risk projects. 16 So do you want me to go into the detail of that piece or kind 17 of go through all the different projects? 18 When you say high risk projects, let's -- before we go Ο. 19 forward --20 Α. Yeah. 21 Ο. When you say high risk, you're talking about segments, right? 22 High relative risk segments. Α.

23 Q. A segment?

24 A. Correct. Yeah, Optimain divides it into segments.

25 Q. Segments. Okay.

1 A. Correct.

Q. Yeah. So you can go -- well, I think we -- you can continue on --

4 A. Okay.

5 Q. -- with this format. We've heard all about segments and I 6 think kind of understand how that is.

7 MR. EVANS: Do you agree?

8 MR. McLAREN: Yes, sir.

9 BY MR. EVANS:

10 Yeah, you can go on with the rest of your discussion there. Ο. portion 11 So the Optimain, we replace a segment of the high relative Α. risk Optimain score segments. We also have a steel service line 12 13 replacement, and we have a model around that, that we replace --14 so we're replacing 15- to 20,000 steel service lines this year. 15 We replaced about 15,000 last year. So that's another way that 16 we're looking at risk and driving that out. It's an other subset 17 of project types.

We replace DuPont Aldyl-A pipe as well, about 5 to 10 miles a year is our current pace. So that's another risk subset if you will.

Then obsolete components is another. You know, if you've got a regulator that doesn't have replacement parts, that's another one that we go through and drive risk out of our system methodically replacing those as well.

25 I'm trying to think if that's all of our categories. Those

are oh, and relocations. But those are the biggest ones. So
those are, you know, the high risk categories that we know about
and the way we're driving out risk in kind of that planned, you
know, methodically way.
Q. Okay. So now that we know what you look at, and I love your
term I've never heard that before driving risk out of our
system. That's going to be a quote in the report, I can tell you
that. That's a great sentence. Driving risk out of our system.
I never heard that. Anyway, so let's talk about scores.
A. Okay.
Q. Kind of like the logic, you know, kind of like how you use a
score, you know, for a risk score.
A. Are you talking about within Optimain or are you talking
about
Q. Well, wherever you use scores
A. Okay.
Q just to say, okay, this has this score, so we have to act
on it based on that score. Wherever you use that word score in
your work, I'd kind of like to know where you go with that.
A. So I think the biggest two places where we're using some sort
of risk score, if you will, that would be in our Optimain piece.
Q. Okay.
A. So the Optimain has a score at the end of its analysis, and
then it's looking at we look at it as projects that are high
relative risk and break those out. And that high relative risk is

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1	based on a statistical analysis, so that that score can move
2	around from because it's high relative risk. So it's once a
3	year it's run. Optimain is run once a year. So you're going to
4	have a different score every year because it's relative to the
5	system at that snapshot in time.
6	Q. Right.
7	A. So that score is going to change from hear to year, what that
8	high relative risk subset is. And then once we've got that high
9	relative risk subset of projects so Andrew's team creates that
10	and then they send they do a SME review. I think Andrew
11	probably talked to you about this process already.
12	Q. Right.
13	A. And then did he talk about the accelerated action piece?
14	They send those for accelerated leak survey.
15	Q. I don't believe he's talked about that.
16	A. Okay. So once it goes through the SME review process. If
17	they have a high relative risk subset, they send it to SME review.
18	After the SME review, then they go ahead and send it for
19	accelerated leak survey. So they do additional leak survey for
20	all of those in that category. And then from there, it's sent to
21	the planning team for review of which projects get chosen to be
22	replaced out of that set of projects.
23	Q. Okay. I need to go back. So you say that you do you pull
24	out of the Optimain those high risk items.
25	A. Yes.

	1	
1	Q.	And you do an analysis of what's there, right?
2	Α.	Yes.
3	Q.	And this is annual snapshots?
4	Α.	Correct.
5	Q.	And you said the word I heard this word, S-M-E.
6	Α.	Subject matter expert.
7	Q.	Right, SME, that's all it is? SME, that's all that acronym
8	is, c	correct?
9	Α.	Yes.
10	Q.	Okay. I want to make sure of that.
11		And then once you have this data, you actually go to the
12	field	d with that data and do another leak assessment before it
13	becom	nes a project?
14	Α.	So no, at the same time. They're kind of happening at the
15	same	time. So those high relative risk score projects, some of
16	those	e will get replaced and some of those won't, at least in that
17	giver	year. So they all go to accelerated leak survey to be to
18	have	an accelerated action.
19	Q.	And once that accelerated action is addressed, then out of
20	that	group, they have more that they're going to look at?
21	Α.	No, at the same time at the same time, planners are
22	revie	ewing and replacing some of those projects but it may not be
23	all c	of those high relative risk segments.
24	Q.	And how do you make your mind up of which ones of those ones
25	they	make? Is there a score for that?

1 There's -- they have the list kind of top to bottom, Α. Right. 2 highest of the high, all the way down, inside of that set. And 3 the planners focus on the top portion. So the planners are 4 divided by regions. So the list gets sent to planning, and they look at their regions and then they'll look at it and go which 5 6 ones are in my region that are of the highest set, and they'll 7 start talking with our operations folks and our project specialists that are out in the field to -- they'll call them and 8 9 say, hey, we want to do this Optimain segment; what do you think 10 about this project? Do you think it's something we can implement 11 soon? How soon?

And they might say -- we have project specialists who say, well, that's a good project but there's one down the street that we had a leak on last week; can we add that to it? And so then they'll add that to it, and then start getting a project ready for engineering to take over. So they're working on getting that scope nailed down, because sometimes it's not just that Optimain segment that needs to be constructed, but even more.

19 Q. I see.

A. So that's why it kind of goes to the planning team, is they're reviewing it and then it goes to additional subject matter experts on the project specialist side and operations side to really make sure that the scope is appropriate before it gets sent to engineering --

25 Q. I see.

1 A. -- to design and construct.

Q. And do you blend this with ongoing projects? I mean, if you have something excavated and you're doing something like 20 feet away?

A. It can be, yeah. I mean, and we've had ones where we've added the scope due to -- like they'll say, can we just go a little bit farther because there's poly here and there's poly here. Why not just go another 300 feet and get all of the steel out of this area?

10 So that's part of the reason why it comes back to a planner 11 and it isn't just an automated we're just going to do this 12 Optimain segment. It's really a holistic view. They might know 13 that there's a city project going on in 6 months; well, let's just 14 do it when the city's doing it. So there's a lot of review that 15 goes on.

16 Q. I see.

A. Or somebody's called in a request for additional customer
service there, like a commercial customer. Well, let's increase [issues]
the size of the line. We had pressures there last winter; we
should change the size of it from what it is today.

So there are a whole lot of things that go on in that process outside of just an automated it's a high risk Optimain score. There's a multitude of things. We want to make sure that we're constructing it and only going back there one time and not going 6 months from now due to a pressure issue or whatever.

1 Q. Right. So if I'm the manager of a construction crew or a 2 superintendent or whatever you call them, foreman, and I'm going 3 to make a fix because I have a work order that says dig this up 4 and fix this. Can I be assured that what I'm working on is not going to be part of a project that's 20 feet away? Does that 5 6 communication go back and forth? 7 I'm not sure I understand the question. Can you say it Α. 8 again? 9 Yeah. If I'm a construction guy and I know that I have a Ο. 10 work order, I have to go do this, right. Does that work that that 11 person does, has someone already filtered that within your domain 12 so that he's not doing --13 Right. So there's several different project types that we Α. 14 have, and most of them go through planning to make sure that, yes, 15 we're combining those projects appropriately. But operations does 16 have the ability to execute projects. If they go out in the field 17 and they see something immediate, if it's 250 feet or less, it 18 never comes into the planning team. It can just be done by 19 operations. 20 Ο. Just go and do it. 21 Α. Go and do it. 22 All right. And so in those cases, no. But anything that's Ο. 23 not in that immediate determination, that's not 250 feet or less, 24 it will go through the planning team to look at it holistically to 25 make sure that we're kind of grouping projects together

1	appropriately and, you know, using our dollars and our time
2	effectively.
3	Q. So with regard to money
4	A. Yes.
5	Q let's look at this from the standpoint of, you know, a lot
6	of times in companies, people will say we are going to give you
7	this much money for this. Other companies say what do you need to
8	do this work that you've identified? What kind of company are
9	you?
10	A. Collaborative.
11	Q. So it's give and take? If they say we're going to give you 5
12	million, and you say you need 7, you might get 6 or something like
13	that?
14	A. It's collaborative. So they might say we'll give you this
15	many dollars this year and we start off saying, okay, we think we
16	can meet all of our needs within that. And then if a safety issue
17	arises, then we talk to them about it, and, you know, then we go
18	ahead get those dollars. So it's about what the need is.
19	Q. Okay.
20	A. It's not about just doing any projects, but if there's a
21	safety need then
22	Q. Right.
23	A then we get the dollars that are needed from corporate, if
24	that makes sense.
25	Q. Yeah.

1 Α. But at the beginning of the year, there's even a discussion 2 around, you know, is this the amount of dollars we want to -- we 3 have cast iron, you know, we want to get cast iron. We want to 4 get cast iron out of the ground. We want to get all of these out of the ground. And when I layer those up every year, all the 5 6 different -- I haven't had a situation where there's just not 7 enough dollars with what they've given us at the beginning of the year. Now later in the year, things start to arise that are 8 9 unplanned. All right, you have something that was unexpected, 10 then we go back and we ask for an incremental amount. And like I 11 said, I haven't had an instance where we haven't received that 12 incremental.

13 Q. I see.

14 A. They understand what it's going to be used for. I mean, we 15 have a conversation around it, what is it used for? Is it safety 16 related? Is it something that's related to growth? What's the 17 conversation? What's the need and why?

Q. So generally we can say on this interview that when you need money and it's safety related, the funds are made available? A. Yes, they are.

Q. All right. So when you have all these projects going on, and let's use the neighborhood where we had the -- the failure neighborhood, where we had a problem with a pipe in there, and then all of a sudden now we're -- there were actually three grade leaks in like the corners of the property, right? I don't now

1 if you know that or not, but --

2 A. No, I didn't.

3 Yeah. But what I'm trying to figure out is, it appears that Ο. 4 the -- I mean, I haven't been shown or I don't have a good feeling for an understanding of how grade 1 leaks weren't addressed ahead 5 6 of time in that neighborhood, I mean, if it was part of -- you 7 know, those areas were -- I don't know if you can answer the question and maybe we can get it later, but, you know, were the 8 9 grade 1 leaks that were in that neighborhood, were they on your 10 radar? Did you know all about them and, you know, were there 11 problems with those pipes? There's some significant problems with 12 the piping in that --

13 The grade 1 leaks, can you be specific about when they were Α. 14 -- are you talking about the grade 1 leaks found when? 15 Ο. In the time frame -- within a few days of the accident. 16 No. So the Optimain model and those risk models that we run, Α. 17 like I talked to you about earlier, they're a snapshot, right. So 18 they're annually. So they're taking -- so, for instance, like 19 normally by -- sometime between January and March, we run a risk model, and it uses the previous year's -- actually it has to be 20 21 after March. It uses the previous year's leak information to run 22 that snapshot in time.

23 Q. Right.

A. So inside of that risk model we had the previous year. Sothat's not an immediate need. So when I talked to you earlier a

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1	
1	little bit, like the on our budgets we have all those known
2	categories like cast iron and steel service lines.
3	Q. Right.
4	A. Those are all planned. So this would fall into unplanned,
5	and the unplanned work, we really rely on operations to be our
6	eyes and ears, to call us, tell us, talk to us, and we have a
7	funding inbox and then we also have phones because we talk to
8	them.
9	Q. Right.
10	A. We go meet with them on a regular basis. So there's a
11	communications stream there that occurs, but it's also something
12	that flashes up on our radar, outside of getting a phone call or
13	getting an email with the request for funding. But again,
14	operations has that ability if it's immediate and urgent. If it's
15	250 feet or less, there's no reason for them to even pick up the
16	phone. They can just make that decision right there to replace a
17	piece of pipe.
18	Q. So just so I get this clear in my head.
19	A. Yeah.
20	Q. The work that you do is coming from planned, you know there's
21	issues.
22	A. Correct.
23	Q. Everything that you deal with is planned. There are no
24	surprise leaks on your list because they are leaks that people
25	know that they're risks, so you have to look at them because they

1 scored, there's some sort of score about those.

A. Most of our work is. There are ones that are called -- we call them condition based. So if operations, once they found multiple leaks in an area and they want to replace 1,000 feet, a mile of pipe --

6 Q. Right.

7 A. -- they can call us and make that request and then we'd go 8 ahead and go through that. Because sometimes there's things that 9 are more than 250 feet, right? So that work is something that we 10 allocate for, just like in your budget at home, like we keep 11 dollars set aside for if the AC breaks.

12 Q. Right. For rainy days, yup. Uh-huh.

A. So it's the same thing. There's a certain amount of dollars that we kept set aside based on, you know, kind of historical what we tend to spend on things that come up over the course of a year, and we keep those dollars set aside for those types of projects as well.

18 Q. Okay. So I want to make sure I understand. So the field

19 crews have a lot of latitude if they want to just fix something.

20 Like even 1,000 feet, they could -- that could be done.

21 A. 250 feet or less.

22 Q. 250 feet, they don't even have to talk to you folks.

23 A. Correct.

24 Q. They can do it without coming into your group?

25 A. Correct.

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1	Q. So, in essence, that's we could say that that whole
2	neighborhood, the 300-home neighborhood and the 2800-home
3	neighborhood, they weren't on your radar?
4	A. I wasn't aware of the leaks that were going on, on that week,
5	that you're talking about until after it occurred, the incident
6	occurred. So that was not something that was brought to our
7	attention.
8	Q. So in your world though of planning and all that, there were
9	no high risk items that made the hit parade that would have
10	prompted you to send crews into that area or even to plan that
11	work and send crews?
12	A. There were not a significant number of high risk Optimain
13	segments. So if you look at that area, there were no more than in
14	any other typical area.
15	Q. Okay. So what you're saying is, if you were given that
16	score, it was a low score for likely the probability of that type
17	of consequence thing for that particular area because you had
18	you don't have any known reports of multiple leaks in that area in
19	the work that you do? There's nothing that you had ahead of time
20	that would have said, well, we knew about that area. That's why
21	we we understand the fact that they're going to curtail 2800
22	homes because that's all on my radar; I knew about that.
23	A. No, that wasn't anything that we
24	Q. But that that was not on your radar?
25	A. No.

1	Q. 7	And neither was the other neighborhood with the 300 homes,
2	correc	ct?
3	A. 1	No.
4	Q. 1	Nothing on your radar to say that immediate high risk items
5	need t	to be addressed?
6	A. 1	No. If you look at the area that was shut in, if you I
7	mean,	if you want to get into the nitty-gritty of it, the numbers,
8	there	are between 150 and 200 Optimain segments.
9	Q. 1	Right.
10	A. 7	Three of those were high relative risk out of 150 to 200. So
11	were t	there none? No, there were not none, but that's not an
12	unusua	al number for any given area.
13	Q. (Okay. Low percentage?
14	A.]	Low percentage.
15	Q. 1	Right. Okay. I want to make that very clear to everyone
16	that :	reads this report, that it sounds like you had your hand on
17	the pu	ulse of a number of problems in those two neighborhoods.
18	That's	s what I guess I'm
19	A. (Correct. an unusual number. Just to be clear, I would not characterize this as a "number of
20	Q	making sure we get that on point across.
21	A. (Correct.
22	1	MR. EVANS: Okay. Interesting. That's all I have right now.
23	ľ	MR. McLAREN: Oh, well, thank you, Roger. This is Chris
24	McLare	en.
25	H	BY MR. McLAREN:

1	Q. Yeah, so I was just kind of studying the map that shows some
2	of the graded leaks around centered around the alley between
3	Espanola and Durango Drive, and I guess a lot of those leak
4	surveys took place following the accident. Had there been when
5	was the most recent leak survey that you were aware of on that
6	area?
7	A. That's not something that I know. You probably have to ask
8	Marlo that.
9	Q. Okay. Do you do are you responsible for the IDL, the
10	Picarro car?
11	A. No, that would be Marlo as well.
12	Q. Okay. And very good. All right. So there was no
13	replacement of a large area identified here, just the three high
14	risk segments in that 150-segment area, were in the high risk
15	category?
16	A. High relative risk category, there were three, correct.
17	Q. And for 2017, the number was 89 to make it into a high risk
18	category? That's what Andrew had indicated.
19	A. Yes.
20	Q. And that this actual segment from one road to the other, it
21	was scoring about an 8 because it only had one previous leak
22	identified. Okay. All right. So that planning cycle that you
23	were just describing
24	A. Yes.
25	Q how long is a typical time for it to go from

25

1 identification to planning to operations? I mean, I know it's 2 going to vary. Can it be quite lengthy sometimes? 3 No, it's pretty quick. So from -- if it's something that an Α. 4 operations or project specialist calls and says or emails, we have a capital funding inbox, an email inbox, that's manned every day, 5 6 all day, by those two asset planning specialists. Those are 7 people that are watching that.

8 So that process, as it comes in, and then within a few hours 9 it goes to a planner, and the planner's goal is to turn anything 10 around in 2 to 3 days. And for the simplest requests, we see them 11 turned around within 1 to 3 days. When it gets to really 12 complicated requests -- when I say complicated, I'm talking about 13 long-term, you know, year-long types of projects.

Sometimes it can take longer to review and provide a recommendation. But for the most part, for the types of projects that we're talking about, operations calls, we want 1,000 feet, 2,000 feet, it's a couple-day process. If it's urgent, then they're encouraged to just, you know, proceed. But in general, they want to make sure it goes to planning to ensure they looked at a really holistic approach to the replacement.

21 Q. Okay. And then following the accident during these

22 replacements that took place --

23 A. Correct.

Q. -- that would have certainly been accelerated, all hands on deck type of planning and --

1 Α. So the replacement -- the decision to replace was something 2 that Jeff made. It didn't come through myself or my team, but 3 Jeff did ask our team to put together the sizing for the 4 neighborhoods that were affected. So our team, yes, it was all 5 hands on deck making sure that we had the appropriate pipe sizing 6 ready for those folks to go ahead and install the new pipe to the 7 neighborhood. And would you describe -- is it a 2800 or 3100 home area, 8 Ο. 9 would you describe that as the steel service, steel main area as 10 the predominant material? 11 The material that was there previously was coated steel. Α. Т want to say it was mel-wrapped steel. What we install today would 12 13 be poly. 14 And then during that installation process, was it most Q. 15 directionally drilled or surface bored? 16 I can't speak to the construction process. Α. 17 Q. Okay. 18 You probably want to ask Jeff. Α. 19 But you would have gone in with all poly mains and services? Ο. 20 Α. Correct. 21 Ο. And then how do you do your fusion of poly? Do you use 22 electrofusion predominantly or do you rely on trained and 23 qualified fusers? What's the rationale you use? 24 That's not really something that I can speak to. Α. I mean, I 25 just -- that's not something my team does. So it's probably a

better question for someone else on the construction --1 2 Operations? Construction? Ο. 3 Α. Yeah, construction management side of things. 4 Ο. Okay. All right. I'm going through some questions. So leaks is Marlo. If I had any other questions, it would be Marlo. 5 6 Even about self-assessment of the leak management program? 7 Yes, that would be Marlo as well. Α. I've got that. How familiar have you been with the 8 Okay. Ο. 9 effect of the -- help me, Tom -- the geology and hydro --10 Geological and hydrological. MR. TOBIN: 11 BY MR. MCLAREN: 12 Q. -- hydrological soils issue with the -- I assume we're 13 talking about the bentonite clay. 14 So I've been -- Jeff and I have met with John Bryant in the Α. 15 last couple of weeks to talk about soils, and geological features, 16 hydrological features and understanding how we can assess those on 17 our system as a whole. So it there are other areas that display 18 some of the characteristics that we've seen -- that we saw in the 19 incident area, to make sure that we're aware of those and to make 20 sure that we can incorporate those into our risk models and 21 replacement plans in the future. So we've begun that process. 22 And so the places that those improvements would be made would 0. 23 be in the risk model. Can you go back through where you're 24 looking at to make possible changes? 25 So right now, we're just in the process of getting the Α.

1 information from John Bryant, and him identifying areas. So the goal would be for him to circle, you know, areas on a map that we 2 should look at that might have certain hydrological and geological 3 factors. Right now he's saying, you know, he doesn't see anything 4 5 that has all of the ones that we saw in that incident area, that 6 he's saying like we've got some of them and we probably want to be 7 aware of what some of those are. So we asked him for that 8 information.

9 And then, you know, we haven't made a determination as to how we're going to incorporate it into our risk model. We just know 10 11 that we plan to incorporate it into our risk model, and I could 12 see a lot of different ways to do that. We want to make sure we overlay it with what's the pipe in that area. If it's already 13 14 brand new poly pipe, we will probably focus on an area that's got, 15 you know, more cast iron or more steel pipe. Just if we're looking at the same geological features, if he says both of these 16 17 are risky, which one would you look at. We'd look at ones that 18 have, you know, more.

19 Q. So we're in the awareness phase.

20 A. We're in the awareness phase.

21 Q. Gathering knowledge.

22 A. Yes.

23 Q. And is this a stratographic feature in terms of the soil

24 layer crops out at the surface?

25 A. I don't know.

1 Q. Or is it -	_
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2	A. I don't know enough about that to speak to it.
3	Q. Isn't it primarily an expansion of it based on hydration?
4	A. I don't know enough about it to speak to that either.
5	Q. Is it similar to the contraction events that took place with
6	the mechanical fittings in the drought situation, where the soil
7	was contracting and it was pulling the unrestrained couplings on
8	the steel lines apart some time ago?
9	A. I don't know enough to speak about that either.
10	Q. Okay. What is the history with mechanical couplings on the
11	Atmos system and the replacement programs around them and leak
12	rate, et cetera?
13	A. I don't have a detailed history. Jeff is probably your best
14	person to ask that to. I mean, I've been in this role about a
15	year and a half. So a detailed history about steel service lines
16	is not something that I can really speak to.
17	Q. Okay. With regards to making sure we're doing the right
18	things, to reduce to drive risk out of our system
19	A. Yes.
20	Q what use of performance metrics do you use? We were
21	provided a listing of these, which are typically
22	A. Yes.
23	Q distribution IM rule, required minimum performance
24	measures.
25	A. Yes.

1 Ο. Do you use other more granular performance metrics and for 2 the specific accelerated items or risk mitigation measures that 3 you are taking within your DIMP plan, could you describe the 4 performance metrics used to track the performance of those 5 programs? 6 Α. The performance metrics for which programs? 7 Well, within the DIMP rule, for those actions you take to Ο. 8 mitigate risk based on going through the DIMP program. You're 9 required to also have metrics to track the performance of those 10 from a baseline. So there's a lot of different --11 Α. 12 Yeah, I can. Q. 13 Can you tell me what you mean? Α. 14 In 1007(e)(6), it -- I mean, we've got the DIMP requirements, Q. 15 but then I'm just trying to see what other performance metrics you 16 might use. It would be the (e), 1007(e). 17 Do you have the DIMP plan? Can I see --Α. 18 Ο. I do. 19 Α. Either way. 20 I'm just trying to understand the use of performance Ο. Um-hum. 21 metrics within the programmatic management. 22 Are you talking about the annual performance measure Α. 23 effectiveness back here? 24 That would be -- that may be it. It would be within that Ο. 25 performance measurement piece, and it would be those (e)

	n
1	performance measures, four of which appear on the annual report.
2	The fifth is by material which you also have there, and then the
3	sixth is for those risk reduction measures.
4	A. I think these here I mean this is a primary one. As you
5	can see, it shows that we're driving leaks out of our system.
6	Q. Yeah.
7	A. So I mean in general, that shows that our DIMP plan overall
8	is effective. So I take this is our primary. If there's
9	something more specific that you're looking for
10	Q. Do you use any other dashboards or any more granular
11	performance metrics for anything other that you do?
12	A. I'm not the owner of any of those. Marlo might have some.
13	Andrew might have some just that he keeps because he likes to kind
14	of look at those just on his own, but I don't have anything more
15	specific that I specifically look at.
16	Q. Okay. On Chapter 6, page whatever, we had a little printout
17	of it here earlier, it had the listing of all it was a listing
18	of all the
19	UNIDENTIFIED SPEAKER: Is this the one?
20	MS. ESPINOZA: Yes.
21	MR. McLAREN: That's probably it. Yes, sir, that's it.
22	BY MR. MCLAREN:
23	Q. No, you keep the book. It's got a listing of a whole lot of
24	the different programs. You can keep that one. So we talked
25	about driving risk out. You did cast iron replacement, steel

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1	service line replacement, DuPont Aldyl-A, obsolete component,					
2	relocations locations , operations can do anything they want to less than 250					
3	feet. We have that one. Optimain analysis projects. And so					
4	we've got these process required drivers, on the operations one,					
5	but here we've got programs. And so the one that kind of stands					
6	out to me is the cross bore. Is that something that you manage or					
7	is that					
8	A. I'm not responsible for cross bores. That's primarily					
9	Marlo's team.					
10	Q. Okay. Let me have the book back then please.					
11	A. Okay.					
12	Q. Next question. So if continuing surveillance program					
13	identified change along the pipeline, would that come in through					
14	Marlo?					
15	A. I'm sorry. Say that question again.					
16	Q. If the continuing surveillance program identified change					
17	A. Right.					
18	Q either during a patrolling program, which I thought I saw					
19	here earlier, or other change was identified.					
20	A. Yes.					
21	Q. And so this was information that was new that needed to be					
22	updated, not necessarily a class location, but maybe even right-					
23	of-way encroachments or whatever.					
24	A. Right.					
25	Q. How does that information come in?					

A. Marlo's team patrols that. Frequently, you know, practically speaking, operations tends to give us a call and say we've had an encroachment. We'd like to do this project, and that tends to be actually how it gets to our team. It's less data driven in a lot of ways. Just in general, it's more of operations sees it, calls it in and then we work on, you know, appropriately putting together a project for it.

Q. So if there's an abnormal operations event, an over pressurization, or other type of thing, it's really up operations that's responsible for going and understanding the cause of that abnormal operating condition and preventing recurrence. Similarly with continuing surveillance, the requirement to identify change, take actions, would be an operations piece.

14 A. The data is collected by Marlo's team. I think in a 15 practical sense, the way my team ends up receiving it is 16 frequently at a field call from operations because if you're 17 waiting for an annual time, whenever it gets collected, something 18 could occur in between.

19 Q. Exactly. That's what I'm speaking to.

A. So I mean that's part of the whole reason when I talk about our planners being in tune with operations and even Andrew's team as well, there's, you know, regular meetings they're having with operations to facilitate, and it's not necessarily formal meetings. It's times where hey, a project has come up. Can you come by the office and talk about this in person and then other

subjects like that might come up while we're there. So that's just kind of an ongoing conversation that occurs as opposed to just waiting for that data to come in.

4 Ο. Okay. Another more formal one might be the requirement to investigate failures, to determine their cause and take actions to 5 6 prevent recurrence. That may be more formally documented. Does 7 that involve you or is that -- how does -- I ended up with a grade 1 mechanical fitting leak as one was noted just on the edge of 8 9 that alleyway in question from where the incident occurred. So if 10 the mechanical fitting was dug up, identified as a failure, cause 11 was established and actions were identified to prevent recurrence 12 of a similar failure. How does that information come in, from who 13 and who digests it and documents it and takes action? 14 So I'm not sure I have all the information that you need, but Α. 15 from what our team does, is that we would actually take that data, 16 that information, and put it into a risk model. So even if a pipe 17 is repaired or replaced, that information about that asset type 18 ends up going into some of the analysis of the likelihood of 19 failure in the future for those types of assets. So that data's 20 still collected and incorporated in to Optimain, and into that 21 risk analysis.

Now as far as the processes of what's occurring in the field and how decisions are made in the field, that's not something that my team is actively part of day-to-day.

25 Q. Okay. What about the odorization program? I'll ask you

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1	before Jim gets to. Do you have I'm stealing his thunder. Do
2	you have any new ground providing the because it's on the list.
3	Could you just discuss your the way it impacts you and any
4	responsibility you have for the odorization program please?
5	A. I do not have any responsibility for the odorization program.
6	Q. And to your knowledge, who does that reside with? Is that
7	operations?
8	A. That would be operations. Jeff should be able to speak to
9	that a little bit more. He's got more background in operations
10	than I do.
11	Q. Okay. One more time just to close out so I don't have any
12	further questions on performance metrics. Are the performance
13	metrics, on the piece of paper I handed you, are those them? Is
14	that it?
15	A. These are our primary performance metrics, yes.
16	Q. Okay. Dealing with system integrity and safety system
17	integrity?
18	A. Yes.
19	Q. Is there any other performance metrics you might use,
20	dashboards for system integrity?
21	A. Not that I can think of.
22	Q. Okay. I think that's all the questions from me for the time
23	being. Thank you.
24	MR. EVANS: Jim.
25	MR. COLLINS: Jim Collins, Railroad Commission of Texas.

1	Since Chris took my one question, I don't have any. Thank you.
2	It's okay.
3	MR. McDILL: John McDill, Atmos Energy.
4	BY MR. McDILL:
5	Q. Tammy, thank you for the discussion this afternoon. You
6	covered a lot of ground, and a lot of ways of how, you know, you
7	and your team go about, you know, filling replacements of
8	infrastructure and really driving risk out of the system. Just
9	maybe to clarify because it's, you know, a new process that
10	everyone's probably hearing a little bit about. So you talked
11	about there's kind of a path for known
12	A. Right.
13	Q which takes in a broad group of things from Optimain, I
14	heard you say, steel services, cast iron, DuPont Aldyl-A, false
15	leak components, kind of summarizing.
16	A. Correct. Yeah, relocations as well.
17	Q. Relocations as well.
18	A. Yeah.
19	Q. And then there's the kind of unknown events that may occur.
20	A. Right.
21	Q. And that would be events raised by operations?
22	A. Those are primarily who they come from. Sometimes they might
23	come from a project specialist just because there's construction
24	projects in the area.
25	Q. But those are generally people who are located across the

1	system?
2	A. Those are people that are, yes, located primarily in our
3	offices all across the system, all across the state.
4	Q. Okay. And you were speaking to the speed at which funding is
5	provided to address those risks?
6	A. Yes.
7	Q. So it sounds like it was very quickly?
8	A. Yes, we strive to be very responsive. So anywhere from a day
9	to 3 days, and we encourage if it's not if for some reason
10	they don't hear back from us in the timeframe that they need it,
11	to contact us again.
12	Q. Okay. And there's multiple avenues, but there's other
13	designated avenues where operations all across the state can
14	provide requests back to you either can you speak to those?
15	How do they make those requests normally?
16	A. The requests could come in, in a variety of ways. The
17	primary way is to be either through picking up the phone and
18	calling somebody on our team, whether that's an asset planning
19	specialist or somebody on the system planning team or myself or
20	Guilford John Gilford , as well as email. So we have those two avenues, and
21	we have a dedicated email inbox that's manned all of the time. I
22	ensure that when somebody's on vacation, that somebody's covering
23	it, just to make sure that there's no gap in time when funding is
24	needed, we can address the need.
25	Q. Okay. Andrew described earlier that there's kind of a path

1	where the Optimain results go through a subject matter expert
2	review
3	A. Yes.
4	Q and are verified. And it sounds like if I understood you
5	planning correctly, that the asset plan specialist, that they're engaged
6	also with on a regular basis with operations?
7	A. The asset planning specialists are if you they might talk
8	to them about the timing of it. So that way they know when the
9	funds are needed to make sure that we've got the budget at the
10	right time for the projects. So the planner is typically the one
11	talking the most with operations, but the asset planning
12	specialists do as well. They're all working together a lot. They
13	talk. They sit in the same they work together as a team.
14	Q. So you have the system planners.
15	A. Um-hum.
16	Q. They're the ones who are regulating and engaging operations
17	around?
18	A. Correct.
19	Q. Helping finalize determinations and
20	A. Correct. The team makes sure we have a holistic scope as
21	opposed to just going and replacing it without kind of
22	mindlessly. We want to make sure that we're looking at the system
23	holistically, that we're not tearing up the street again in 6
24	months with a different replacement, for a different size due to a
25	pressure issue or any other replacements that might be needed.

1	0.	Tt's	in	coordination	with	
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2 A. Right.

3 Q. -- a municipal project and other things that may be going on.
4 A. Right.

5 Q. Okay. With respect to funding --

6 A. Yes.

Q. -- you just stated this, but your experience with funding, if someone had a request that wasn't above what had been typically allocated for budget needs, the process you would go through to get the funds or the ability to get the funds --

11 A. So if it goes above what we've got kind of allocated for the 12 year.

13 Q. Um-hum.

14 Yeah, I would talk to Jeff about it, and explain what the Α. 15 scope is and what the need is, and then he would work with 16 corporate to make sure we understand what the need is, and then he 17 would work with corporate to make sure we understand what the need 18 is, all agree that it really is a safety need, and then they would work to allocate the funds to us, to make sure we can implement 19 20 the project. requests

Q. In your experience for any safety related quests that was (indiscernible), your experience is, have those been funded?

23 A. They've always been funded.

24 Q. Okay. Thank you.

25 MR. McDILL: That's all the questions I have.

1

MR. EVANS: Okay. Thanks.

2 BY MR. EVANS:

3 Let's go back to soil just briefly. This is Roger Evans by Ο. 4 the way. On the soil side, and I know I've read the report, the 5 Bryant Engineering report, when Mr. Bryant came around and talked 6 to you about that issue, and who was with you did you say? 7 Jeff and I -- I've been in meetings the past probably 2 to 4 Α. weeks with John Bryant. So the initial timeframe, I wasn't 8 9 engaged with John until more recently. 10 Okay. Ο.

11 A. I have a more forward looking, if you will, on how we're 12 planning for future projects.

13 Q. Okay. So -- and I know you're not a soil specialist.

14 A. Right.

15 Ο. You've already told us that. So just a few questions about 16 that. So when you were having discussions with Mr. Bryant, were 17 there discussions that centered around the fact that that 300 home 18 neighborhood or that 2800 home area, those are both impacted by 19 the type of soil that causes expansive movement and all that? 20 The meetings I was involved with, for John Bryant, were more Α. 21 holistic in nature. So they weren't really about that particular 22 area. It was more where are -- so if these factors are going on 23 here, could there be similar factors anywhere else. So we were 24 asking him those types of questions to go forward. So I wasn't 25 involved in that specific area.

1 Q. Okay. So I mean were his comments to that though like there 2 was a likelihood about those types of areas in your network? 3 So far what he's seeing is that the -- there are a multitude Α. 4 of factors in that area, and other areas might have 2 or 3 of 5 those factors, but this area might have 10 factors and other areas 6 might have 3 or 4. So nothing as severe as what was seen in that particular area. 7 And when you say that area, do you mean the 300 home 8 Okay. Q. 9 area or the 2800 home area or both? 10 Both. Α. 11 So when he made the comments about that, were those Okay. Q. 12 based on soil samplings? He went out and drilled and pulled up soil? 13 14 You'd have to ask him what that's based upon. Α. I don't know. 15 I don't know what he based --16 The phrase soil samples did not -- I mean when he was Ο. 17 talking, did he say based on soil samples, nothing like that? 18 Α. Are you talking about around the state or in that area? 19 In that area, the 300 and the 2800. Ο. 20 I mean I've heard that they're taking soil samples there, but Α. 21 I don't know -- what else are you -- are you talking --22 No, was he talking --Q. 23 -- about what's around the other --Α. 24 Yeah, I was just saying -- was he saying that -- for him to Ο. 25 make a statement that there are this many factors in that region,

1	
1	to me, tells me that he must have taken some soil samples. Did he
2	reference soil samples in your discussion I guess is what I'm
3	asking?
4	A. Yeah, they were talked about because I know they've been
5	taking soil samples in that area. Now the timeline that when
6	he took that and what statements, I can't speak to that.
7	Q. Okay.
8	A. Is that
9	Q. Yeah. That answers it.
10	A. Yeah.
11	Q. Yeah, that answers it. I'm sorry.
12	A. So I mean I know he's got a lot of knowledge about the area
13	and
14	Q. Right.
15	A and I know they're taking soil samples. When they were
16	taken versus when his report was done, that's a question you'd
17	have to ask him.
18	Q. But when he was talking about factors in other areas
19	A. Um-hum.
20	Q that some of the areas may have less or more factors
21	A. Yeah, that's just based on his general knowledge at this
22	point.
23	Q. Oh, not on samples.
24	A. We haven't asked him to take any samples anywhere else in the
25	state at this point.

1	2. Okay. So when you in the discussions about risk
2	A. Yes.
3	2 have you theorized how that might be applied?
4	A. Yeah, I mean we've started thinking about it and talking
5	about it a little bit. There hasn't been any decision on exactly
6	now we want to proceed with that. We really want to let kind of
7	the geotechnical engineer be the geotechnical engineer and tell us
8	what the different soil, geological and hydrological conditions
9	night be that could affect the pipe and then start applying
10	chat
11	2. Right.
12	A in the appropriate manner and make sure that it's thorough
13	and that it's appropriate and thought through before we just
14	start.
15	2. Okay. So not that it matters today, because it's going to be
16	a while before this report gets written.
17	A. Okay.
18	2. It could be a year just to be blunt about it.
19	A. Right.
20	2. But would you say that today, based on what you know today,
21	that soil will become a factor in your risk model?
22	A. Yes.
23	2. That's a definite?
24	A. It will become a factor in our risk model.
25	Q. Okay. That's good to know. Thanks. So back to that

	II	
1	neighborł	nood again, and the fact that I'm trying to I don't
2	mean to k	peat a dead horse, but I mean this is just kind of
3	bothering	g me. I look at, you know, Chris just had that drawing
4	up, but v	we have a drawing. Let's just show her the drawing. We
5	might as	well. I don't know if you've seen it.
6	MR.	McLAREN: The circles.
7	MR.	EVANS: Yeah. No, no, not that one. The part of the
8	that one.	
9	BY N	MR. EVANS:
10	Q. This	s is probably the most troubling drawing I've had in a
11	long time	e.
12	A. The	most troubling what?
13	Q. Drav	wing. Have you ever seen it before?
14	A. No,	I have not seen this drawing before.
15	MR.	EVANS: Okay. And you've seen it, haven't you?
16	MR.	McDILL: I have not.
17	BY N	MR. EVANS:
18	Q. Okay	Y. Well, this is a those white bubbles on that drawing
19	depict ga	as your gas surveys, your leak surveys, the
20	MR.	McLAREN: Bar holes.
21	BY N	MR. EVANS:
22	Q k	par holes. The white bubbles are bar holes.
23	A. Okay	<i>!</i> •
24	Q. And	you see we have three homes that have issues, the two
25	green and	d the yellow, and you see how close they are, and we have

1	all goose eggs on those two properties, but then if you look over
2	on the north is straight up on the drawing by the way. So if
3	you look in the southeast corner, you look in I mean the
4	southwest corner, you look in the northwest corner, you see two
5	grade 1 leaks. They're hard it's hard to read.
6	A. Got it. I see it.
7	MR. McLAREN: One in the alleyway and two in the road.
8	BY MR. EVANS:
9	Q. Yeah, there's three of them I think over there.
10	A. I see it now.
11	Q. Okay.
12	A. Thank you.
13	Q. So we put this together based on well, I had to talk to
14	some high level people at the NTSB and I had to put something
15	together to show what we knew.
16	A. Okay.
17	Q. Right. And it's a very confusing this is a very confusing
18	case for us. I can tell you that right off the bat because of the
19	goose eggs. Those zeros on those two properties are really, you
20	know, alarming. No gas well, we had two homes that burned and
21	two gas issues. But what I'm trying to figure out is with your
22	statement you just made, that talks about you have three high risk
23	items on 150 segments, in that particular area.
24	A. In the area, when I say that area, I'm talking about the
25	shut-in area. So not that street and not the 300 but the largest

1	area	
2	Q.	Okay.
3	Α.	Does that paint that picture for you a little clearer?
4		MR. EVANS: I didn't did you understand that?
5		MR. McLAREN: Yeah, the 100 to 150 segments is 3000
6		MS. ESPINOZA: It's about 150 to 200 segments in the large
7	area	
8		BY MR. EVANS:
9	Q.	Oh, okay. Okay.
10	Α.	So it's a total of so I believe that the Optimain actually
11	has	this particular alley as one segment if you will.
12	Q.	One segment was the alleyway.
13	Α.	Right. So but if you look at it as a whole
14		MR. TOBIN: Just to be clear, that was not the testimony.
15		MR. EVANS: Introduction.
16		MR. TOBIN: I'm sorry. I'm Tom Tobin. When you said one of
17	the	Optimain high risk segments was in the alley, that's not been
18	the	testimony.
19		MS. ESPINOZA: No, that's not correct.
20		BY MR. EVANS:
21	Q.	But you identified one segment in that
22	Α.	So if you think of the entire shut-in zone, where I had the
23	24,	2800 homes, whatever that number was. There were about 150 to
24	200	Optimain segments
25	Q.	Right.

i	I	
1	Α.	in that area.
2	Q.	Right.
3	Α.	Three of them were in that high relative risk category out of
4	that	entire
5	Q.	Okay. Of the large group.
6	Α.	large group.
7	Q.	Of the 2800.
8	А.	Yes.
9	Q.	Okay. What about this section? Do you know?
10	Α.	The section was not.
11	Q.	There was nothing in that section.
12	A.	That section there, in that alley, was not considered high
13	relat	tive risk according to the Optimain log.
14	Q.	So no high risk items in that whole area right there?
15	A.	Well, that alley.
16	Q.	That alley.
17	A.	I would have to look at if you needed a segment by
18	segme	ent, I would need to look into that.
19	Q.	Could it be possible that these class 1 grade 1 leaks on
20	the I	left-hand side of the page could be in another segment that
21	have	that were destined to be on your scorecard?
22	Α.	I don't I don't know. That were destined to be
23	Q.	No, that had been identified and now they're one they have
24	a sco	ore. That would make them
25	Α.	I would have to look at our results. Would you like us to

1	just	
2		MR. McDILL: John McDill.
3		BY MR. McDILL:
4	Q.	Maybe, Tammy, the right question, just to make sure we're all
5	very	clear
6	А.	Yeah.
7	Q.	because it's a lot of segments. Some Optimain segments
8	apply	y typically up to no greater than 2,000 feet in length.
9	А.	Typically, yes.
10	Q.	Okay. And when you speak to 150 Optimain segments
11	A.	Um-hum.
12	Q.	that reflects the area that was for the planned outage.
13	A.	Planned outage, correct.
14	Q.	of 2800 homes.
15	Α.	Correct.
16	Q.	And within that probably 150 segments of the planned
17	outag	je
18	A.	Yes.
19	Q.	there were 3 Optimain segments that were high relative
20	risk	within the 150 or so segments of the planned outage?
21	A.	Correct.
22	Q.	And as far as your knowledge, the outage that's identified
23	between Espanola and Durango, that was not a high relative risk	
24	segment?	
25	Α.	Correct.

i	
1	Q. Do you happen to know what the relative risk was for that
2	segment?
3	A. I believe it was I believe it was around an 8 between
4	an 8 and a 9.
5	Q. Okay. Thank you.
6	MR. EVANS: Okay.
7	MR. McDILL: I just want to make sure
8	MR. EVANS: I'm glad you
9	MR. McDILL: because it can get confusing to make sure.
10	MS. ESPINOZA: Yeah.
11	MR. TOBIN: This is Tom Tobin. If you want a map showing you
12	where the three segments were, that may clarify all this
13	questioning.
14	MR. EVANS: No, I understand now.
15	BY MR. EVANS:
16	Q. I was I'm just trying to figure out why your system why
17	these grade 1s did not appear but your data is a year old. That's
18	one thing. That's a very key point in this whole discussion
19	A. Right. So it's
20	Q is that you're working with year old data, and a lot can
21	happen in a year.
22	A. Which is really why we rely on the operational side of things
23	to kind of be the eyes and ears in (indiscernible) of the system.
24	Q. Right. Yeah.
25	A. They know if something looks different than what it did a

-	-	
1		aao
–	MEEV	ayo

2 Q. Okay.

3 A. So that kind of goes back to the known and unknown.

4 Q. Okay. So back to the area in the large area where they --5 you had the three. Had they been scored?

6 I know that they were high relative risk. I know that one of Α. 7 those three had been replaced, and outside of that, I don't know what the scores were on those three. I know they weren't in the 8 9 top 100, if you will, of the segments that were high relative 10 risk, but outside of that, I don't know their exact scores. 11 Okay. So just since we're talking about that 2800 homes, all 0. 12 the segments and 3 issues. So typically in an area that size, and 13 having three issues, they could have a high score which would 14 create a demand to go out and get it fixed guickly. That could be 15 -- not that -- I mean but it's not unusual I quess to have 3 out 16 of an area of 2800 homes --

17 A. It's not.

18 Q. -- for someone to say, go ahead and go fix those because 19 they're scoring high.

20 A. It's -- I'm not sure what the question is. Are you asking if21 it's unusual that there were three in that area?

Q. No, no. I'm sorry. What I'm trying to figure out is when you have three items --

24 A. Um-hum.

25 Q. -- in an area that large --

1 A. Um-hum.	
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2	Q if they score 8, 18 or 80, if it scored 80, you'd go out
3	and fix it. It would make the hit parade to go and fix it,
4	correct, if it was a high risk area item? You would actually
5	make the effort to go into that single item
6	A. We do. We go and replace, you know. We go through that
7	Optimain list every year, and we go and target the top of the high
8	relative risk segments, and we go segment by segment. So there
9	could be one in east Texas and one in west Texas and one in
10	Dallas, and one in Sherman and one in wherever. They can be
11	everywhere. We go segment by segment to replace those as needed.
12	Q. Okay. Good.
13	A. So we're not targeting one area or another if that's what
14	you're trying to understand.
15	Q. That's what yeah, that's what I'm trying to understand.
16	A. Yeah, it's we will go and take out, but if we see that
17	there's others along that area, okay, well, there's been some new
18	leaks that's popped up in the past month or two, operations has
19	noticed, then we will add to that scope. So does that answer your
20	question.
21	Q. Yeah, that answers it.
22	A. Okay.
23	Q. So the other question I have along the scoring though
24	A. Yeah.
25	Q once an item gets a score, but it's not a high risk score,

1	does that what score do you have to have for that to get some
2	attention or do you just keep looking at it over the next period
3	of time, the next run you do, the next year's data or the next
4	year's data. Because I mean it could score like an 8 and then the
5	next time you run it, it's a 20 and the next time you run it,
6	maybe it's a 25. What point does it have to get to, to where
7	you're actually going to address that issue?
8	A. So the way that we look at our Optimain in particular, so
9	there's the steel service line replacement. There's the cast iron
10	and all those other ones.
11	Q. Right.
12	A. So I'm speaking just about one piece of our kind of risk
13	modeling if you will.
14	Q. Right.
15	A. Is we take that snapshot in time and then every year it's
16	different, and it's a statistical average. So we talk about a
17	mean plus 2 sigma. So it's a mean plus two standard deviations,
18	and you take that and that's your high risk piece.
19	Q. Okay.
20	A. And then you look at all of those as high risk.
21	Q. Right. So something could be high on the list one year or
22	higher on the list one year than the next year.
23	A. Right, because it's high relative risk.
24	Q. High relative risk, okay.
25	A. So when we talk about, you know, the we include things

1	like, you know, if there's schools, if there's churches, if
2	there's consequences. So one could be lower one year and higher
3	the next year, not because the pipe changed but because a school
4	went in nearby, and that raises the consequence, in that risk
5	equals
6	Q. Oh, okay.
7	A likelihood times consequence
8	Q. Yep.
9	A formula.
10	Q. Right.
11	A. Does that make sense?
12	Q. It makes sense.
13	A. So I mean that's part of the reason it's an annual process,
14	too.
15	Q. Right.
16	A. We gather all of those bits of data, like buildings and
17	population density and all those other things.
18	Q. Like they're building a hospital today, but it's not
19	finished, but next year it's going to be finished, and it's fully
20	populated with patients, that's going to make that risk score
21	higher.
22	A. That's going to make the risk score higher on the same piece
23	of pipe
24	Q. Right. Okay.
25	A and it would increase it, yeah, from one year to the next.

Q. The key question for me, did you have any role whatsoever in the decision to curtail service at the 300 home area or the 2800 home area?

4 A. No, I did not.

5 Q. Okay. Anyone in your group?

6 A. No.

7 Thank you. You know, we did some -- we haven't --Okav. Ο. we're not done studying it, but we did -- thank you, by the way, 8 9 John, for the -- he gave us the composition of the gas and we 10 studied it. And we found 3 years of where there was tiny, tiny 11 off spec by just small fractions of trace -- almost trace type 12 commodities, but nothing like propane was off or nothing like 13 that.

So the composite of the gas itself was okay, which I know you don't deal with but on the pressure side, we were kind of surprised at the pressures. We have a guy in our group who has been around this a long, long time, and he asked me, are you sure that's the number, because there was a range of like 28 pounds to 49 pounds. Does that sound like a --

20 A. At what location?

21 Q. The 300 home area.

22 A. How did you make that determination?

Q. We had a spreadsheet that's enormous that we did a -- we did standard deviation and we did averaging. We did a whole lot with that spreadsheet, and the numbers were kind of like -- we were

just wondering if -- is that 28 to 49 pounds, does that sound --A. That doesn't sound unusual off the cuff, but I haven't dug into the pressures on that system to -- I mean 28 to 49 doesn't sound very unusual to me.

Okay. Okay. Good. One of the, you know, we hear in our 5 Ο. 6 business, when we're asking questions, at this kind of situation, 7 you know, doing interviews and stuff, you know, especially when it comes to cast iron. Cast iron, they have a goal -- every company 8 9 has a goal to get rid of so much cast iron. And every year 10 there's a reason why they didn't get the mileage they had, you 11 know, and a lot of times it's because there might be other 12 projects that they had or something got pushed out of the way. 13 I'm just curious, the way your allocation of funding and all that 14 for pipe replacement, can you talk about that a little bit? Ι 15 mean is there borrowing money from Peter to pay Paul when it comes 16 to how that gets allocated?

17 A. No. I mean to give you a little background, I mean so I18 started at Atmos in 2013.

19 Q. All right.

A. A little over 5 years, and from about 2012 to now, we've increased our budget to drive risk out by 3 to 4 times. So when you talk about allocating those dollars, we have the adequate dollars to allocate to drive that risk out of our system that we're talking about. How we make decisions inside those different categories, I mean I can get kind of specific about it. One of

the things that, you know, at the beginning of the year, okay, 1 spend you've got this many dollars. Where do we spent these dollars? 2 3 Right. Well, we go through and we look at all the things that 4 we've talked about spending the money on, that we've said we are going to drive cast iron out. Okay. Well, how -- we said we're 5 6 going to do it in 5 years. Well, how many miles do we have left? 7 How many dollars a year, and we put that in there. Okay. Well. that's -- here's your total amount to take cast iron out. 8 Okay. 9 We want to do this many steel service lines. We want to do this 10 much of our DuPont Aldyl-A, and you just keep going down that 11 list.

12 Q. Right.

A. And then you kind of go, okay, do I have enough for all of those what ifs, those condition based that come up throughout the year, those relocations that come up. A lot of times, the relocations, they're known but they're not all known at the beginning of the year. We just know that they're going to happen --

19 Q. Right.

A. -- because cities are going to do projects. So we look at those and make sure that we've got what we think, based on historical trends and then based on all the goals that we have for replacing our infrastructure, that we have enough dollars to do -to meet our goals for the year.

25 Q. Okay. I was just curious about that.

1		MR. EVANS: That's all I have. So any questions?
2		MR. McLAREN: No, thank you.
3		BY MR. COLLINS:
4	Q.	One quick question.
5	Α.	Yes.
6	Q.	Do you know the total mileage replaced in the 2800 home or
7	foot	age (indiscernible)?
8	Α.	I want to say it's not in my mind right now. I want to
9	say	it was like 28 miles but I could be wrong. Something in that
10	rang	e.
11	Q.	Thank you. That's all I have.
12		MR. McDILL: John McDill, with Atmos Energy.
13		BY MR. McDILL:
14	Q.	Tammy, just you said this already but I want to make sure
15	the	record's clear real quick. When Andrew's group reveals kind
16	of t	he highest relative risk segments
17	Α.	Um-hum.
18	Q.	so there's a part that goes towards planning for
19	repl	acement of those segments.
20	Α.	Um-hum.
21	Q.	But while that's happening, it goes down a parallel path
22	Α.	Correct.
23	Q.	where it goes to a different group
24	Α.	Right.
25	Q.	to help explain.

1 Α. So the high relative risk segments, we take accelerated 2 action on those, and that accelerated action are -- our choices 3 are to either do an accelerated leak survey and/or replace. So 4 all of them get that additional leak survey and then some of those get replaced. Is that what you're speaking to, John? 5 6 Yes. So it may take a while to replace a segment based on Ο. 7 conditions outside of our control, if it's a permitting process. Some of them get replaced immediately and some of them may 8 Α. 9 take a little bit longer in that permitting process. So we 10 wouldn't go ahead and say, okay, we're not going to worry about 11 what the schedule for the city is and all those other things that 12 could happen. We go ahead and leak survey everything just as a 13 matter of kind of due diligence and prudence. We'd rather go and 14 do additional leak survey something that we end up replacing or 15 that's about to get replaced than to not.

Q. I see. Okay. And just the data is refreshed annually, but as needs arise, there's an ability to fund those requests for safety needs regardless if the data's been refreshed or not, as new data is becoming available.

20 A. Right. Exactly.

21 Q. Those that need funded.

A. Those get funded immediately so those can be done immediately by operations if they're 250 feet or less, or if they're more, they'll come through us and we'll do a review to make sure that we get the appropriate, you know, size and scope and pressure on

1	those pipes but there's no lag in that. We don't have to re-
2	crunch it and have a new list before we can implement a project.
3	Q. Good. Thank you.
4	MR. EVANS: Any more questions?
5	MR. McLAREN: No, thank you.
6	MR. EVANS: Okay. That completes the interview.
7	(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: NATURAL GAS-FUELED EXPLOSION OF RESIDENCE, DALLAS, TEXAS, FEBRUARY 23, 2018 Interview of Tammy Espinoza

ACCIDENT NO.: PLD18FR002

PLACE: Plano, Texas

DATE: April 25, 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.

> Kathryn A. Mirfin Transcriber