Docket No. SA-534

Exhibit No. 2-BQ

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

INTERVIEW OF JOHN HARTY, DARCY & HARTY CONSTRUCTION (JAN-3-2011)

(74 Pages)

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Interview of: JOHN HARTY

Marriott Hotel San Francisco Airport 1800 Bayshore Highway Burlingame, California 94010

Monday, January 3, 2011

The above-captioned matter convened, pursuant to

notice.

BEFORE: RAVINDRA CHHATRE Investigator-in-Charge

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1	<u>INTERVIEW</u>
2	MR. CHHATRE: We'll go on the record.
3	Today is Monday, January 3rd. We are currently in
4	Burlingame, California, at the San Francisco Airport Marriott.
5	We are meeting in regards to the investigation of
6	pipeline rupture in San Bruno, California, that occurred on
7	September 9, 2010. The NTSB Accident Number for this
8	investigation is DCA-10-MP-008.
9	My name is Ravi Chhatre. I'm with National
10	Transportation Safety Board, and I am investigator-in-charge of
11	this accident.
12	I would like to start by notifying everyone present in
13	this room that we are recording this interview for transcription
14	at a later date.
15	All parties will have a chance to review the transcripts
16	when they are completed.
17	Also, I'd like to inform Mr. John Harty that you are
18	permitted to have one other person present with you during this
19	interview. This is a person of your choice. It can be your
20	supervisor, friend, family member, or if you choose, no one at
21	all.
22	Please state for the record your full name, spelling of
23	your name, contact information such as phone number, email
24	address, mailing address, and whom you have chosen to be present
25	with you during the interview.

1 MR. HARTY: Yeah, my name is John Harty. I'm with Darcy 2 & Harty Construction. I'm sorry, what was the next -- person 3 representing me here is Josh Goodman. 4 MR. CHHATRE: And we need your contact phone, your --5 MR. HARTY: My phone number --6 MR. CHHATRE: -- email and mailing address. 7 MR. HARTY: -- is 415-My email address is 8 9 MR. CHHATRE: Thank you for that. 10 Now, I'd like to go around the room and have each person introduce themselves. Please state your name, your title, 11 12 organization that you represent. 13 MR. CALDWELL: Geoff Caldwell, City of San Bruno. 14 MR. DAUBIN: Brian Daubin, Pacific Gas and Electric. 15 MR. CHHATRE: Gentlemen, could you please start by giving your spelling of your name, and for everyone, because we 16 17 are recording the conversation, before you ask question, you are 18 to spell your name for the record. Any acronyms that you use, please spell those out, what they stand for, and no interruption. 19 20 We tend to ask follow-up questions immediately because we do not 21 want to forget that, but because it's not a court reporter doing 22 this, you got to state your name and spelling before you talk. 23 MR. CALDWELL: Okay. 24 MR. CHHATRE: So, let's begin again. 25 MR. CALDWELL: Sure. Geoff Caldwell with the City of

1 San Bruno. My name is spelled G-e-o-f-f, C-a-l-d-w-el-l. 2 MR. DAUBIN: Brian Daubin with PG&E. My name is spelled 3 B-r-i-a-n, last name is Daubin, D-a-u-b-i-n. 4 MR. CHHATRE: Title, please. 5 MR. DAUBIN: Manager, Engineering Support Services. 6 MR. FASSETT: Bob Fassett, Pacific Gas and Electric. 7 Company spelling is actually Robert, R-o-b-e-r-t, F-a-s-s-e-t-t, Director of Integrity Management, Technical Support for PG&E, and 8 9 I have been designated the party's representative for this 10 investigation. 11 MS. JACKSON: My name is Connie Jackson, City Manager, 12 City of San Bruno. I'm sorry, C-o-n-n-i-e, Jackson, 13 J-a-c-k-s-o-n. 14 UNIDENTIFIED SPEAKER: I might ask, also that everyone 15 speak up. These don't pick up so great in a room like this. 16 MS. FABRY: Klara Fabry, Public Services Director for 17 City of San Bruno. Spelling, Klara, K-l-a-r-a, F, like Frank, 18 a-b-r-y. 19 Sunil Shori, California Public Utilities MR. SHORI: Commission, spelled S-u-n-i-l, S-h-o-r-i. I'm a Utilities 20 21 Engineer with the California Public Utilities Commission, and I'm 22 the designated party rep to this proceeding. MR. KATCHMAR: My name is Peter Katchmar, P-e-t-e-r, 23 24 K-a-t-c-h-m-a-r. I work with the United States Department of 25 Transportation, Pipeline and Hazardous Materials Safety

Administration, and the acronym there is PHMSA, P-H-M-S-A, and I
 am the party rep for PHMSA.

3 MR. GUNTHER: Karl Gunther, National Transportation
4 Safety Board, K-a-r-l, G-u-n-t-h-e-r, and I'm the Operations
5 Chair.

6 MS. MAZZANTI: Debbie Mazzanti, International 7 Brotherhood of Electrical Workers, Local 1245. Last name is 8 M-a-z-z-a-n-t-i.

9 MR. SPERRY: Joshua Sperry. I'm representing the 10 Engineers and Scientists of California, Local 20. It's 11 J-o-s-h-u-a, last name, S-p-e-r-r-y.

MR. NICHOLSON: Matthew Nicholson, NTSB Engineer, assisting IIC, Ravi, and it's spelled, M-a-t-t, N-i-c-h-o-l-s-o-n. MR. CHHATRE: And Matt also will be taking over the SCADA and the data management work until further notice.

16 And I'm Ravi Chhatre, IIC, NTSB.

17 MR. NARVELL: Rick Narvell, R-i-c-k, N, like in Nancy, 18 a-r-v-e-l-l. I'm the Human Performance Investigator with the 19 National Transportation Safety Board out of Washington, D.C. 20 MR. GOODWIN: My name is Joshua Goodman. I'm with the 21 firm of Jenkins Goodman Newman & Hamilton. My name is spelled 22 J-o-s-h-u-a, last name, G-o-o-d-m-a-n, and I am counsel for Darcy & Harty and Mr. Harty's designated representative here today. 23

24 MR. CHHATRE: Let us begin. This is Ravi again. Let us 25 begin, I guess with the far end and start questioning and just

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1 we'll move sequentially all the way through. Go ahead.

2 UNIDENTIFIED SPEAKER: Just a general, when we have a 3 court reporter, if we want to go off the record we say off the 4 record and then on the record. We do the same thing here and then 5 they just pick that up, is that okay? 6 MR. CHHATRE: That will work fine. That way the 7 transcriber will eliminate that part. 8 MR. CALDWELL: Geoff Caldwell, no questions. 9 MR. DAUBIN: Brian Daubin, no questions at this time. 10 MR. FASSETT: Bob Fassett. I have questions. INTERVIEW OF JOHN HARTY 11 BY MR. FASSETT: 12 13 First question. What was the method of pipe bursting Ο. 14 that was used on the 2008 sewer replacement project to the sewer 15 on Earl Avenue. 16 It was a static pipe bursting head. Α. 17 Can you provide the name? Q. 18 Oh, I'm sorry, it was pneumatic. Sorry, it was Α. 19 pneumatic. Can you provide the name, model, and year purchased of 20 Ο. 21 this equipment? 2.2 I really -- the name, it was a Hercules pipe bursting Α. piece of equipment. I don't know the model number, but I can 23 24 provide that, the purchase and the model number at a later time. 25 So, the name of the equipment used for Earl Avenue Ο.

project and for other projects in the city, was it all the same 1 2 equipment, or did you use different devices? No, different devices. 3 Α. 4 Ο. Can you say where the other devices were used or which 5 projects? 6 Α. It was on the other parts of the projects, different 7 size pipes we used different size --8 Different size heads --Ο. 9 Α. -- heads. -- but the same manufacturer, or different --10 Ο. Yes, same manufacturer. 11 Α. 12 Q. Okay. How many years experience did the lead field 13 person on the Earl Avenue project have with the --14 That would have been --Α. 15 Q. -- person --16 Oh, I'm sorry. Α. 17 No worry. Well, I'll just repeat. How many years Q. 18 experience did the lead field person have on the Earl Avenue 19 project with pipe bursting? 20 Twenty. Α. 21 Q. How were they qualified? 22 Just by experience. Α. 23 So, is there -- is this -- if it's by experience, is Q. 24 this a continuous qualification? On the gas side of the house 25 there's a -- every five years we have to re-qualify people, is it

1

that type of program?

2 It's field qualifications. Α. 3 Ο. Okay. What's the diameter and pipe material of the 4 original sanitary sewer pipe beneath Earl Avenue? Six inch. 5 Α. 6 Ο. And the material? 7 Α. VCP. 8 UNIDENTIFIED SPEAKER: What's the acronym? 9 MR. FASSETT: Vitrified clay pipe, that's what VCP 10 means. 11 BY MR. FASSETT: What were the wall thickness, joint type, joint spacing 12 Q. 13 of the original sanitary sewer pipe beneath Earl Avenue? 14 I don't know that. Α. 15 Q. Don't know. Was the work performed on Earl Avenue done 16 under a change order? 17 Α. Yes. 18 What contract was the change made to? Ο. I don't know that. 19 Α. Did a change order require that you follow the 20 Ο. 21 specifications of the original contract? 2.2 The change order required a pipe burst. Α. 23 Was that different than what the original specifications 0. 24 called for? 25 I believe the original specifications, I had an option, Α.

1 pipe burst or open trench.

2		MR. FASSETT: Off the record.
3		(Off the record.)
4		(On the record.)
5		MR. CHHATRE: Okay. Back on the record.
6		MR. FASSETT: On the record, thank you.
7		BY MR. FASSETT:
8	Q.	So, questions regarding activities performed before the
9	pipe burs	ting operation. Were site, soil, and ground water
10	condition	s investigated?
11	Α.	Site and soils were investigated.
12	Q.	But not ground water?
13	Α.	No.
14	Q.	What documentation was prepared?
15	Α.	Regarding?
16	Q.	The site, soil, and
17	Α.	That was just visual.
18	Q.	So, just visual. It wasn't recorded anywhere of soil
19	type or -	_
20	Α.	No.
21	Q.	OSHA classification or any of that kind of stuff.
22	Α.	No.
23	Q.	No. What were the anticipated sanitary sewer line
24	bedding a	nd backfill composition and consistency?
25	Α.	There is no sewer bedding with pipe bursting.

1 What was the original -- what was the anticipated Ο. 2 bedding around the pipe originally? Was it -- it was clay, so it 3 was native soil or clay? 4 Α. Yes. 5 What was the anticipated gas line, bedding, and backfill Q. б composition and consistency? 7 Α. Clay. 8 What procedures were followed to locate and to document Ο. 9 utilities in the vicinity of the sanitary sewer line? 10 Α. USA. That was during construction. Were you aware of 11 Q. 12 anything that was part of the design of the project? 13 Α. No. 14 Let me just clarify that question. Then the drawings Ο. 15 that you had for the project did not show the locations of any 16 other utilities? 17 Α. No. 18 Ο. No, they did not? 19 No, they did not. Α. 20 Were the depth and diameter of the gas line Ο. 21 investigated? 2.2 Α. Yes. 23 What was the clearance between the sewer and the gas Q. 24 line? On the old or the new? 25 Α.

1 On the existing sewer as it crossed under the gas line, Ο. 2 what was the separation between the two? I believe it was somewhere in the 12 inch range. 3 Α. What's the required clearance separation for the 4 Ο. 5 Hercules equipment? 6 Α. I don't know that. 7 What were the dimensions of the pit excavated at the Ο. manhole at the intersection of Earl Avenue and Glenview Drive? 8 9 Α. Approximately 8 x 8. And the depth? 10 Ο. Eight feet. Everything is approximately. 11 Α. 12 Q. Was the pit centered on the manhole? 13 I can't say. Α. 14 How was the pit excavated? Ο. 15 Α. With a backhoe. 16 What was the size of the backhoe? Was it like a Case Ο. 17 580 size or somewhere --18 Α. Yeah. 19 -- around that? Ο. Case or CAT backhoe. 20 Α. How was the excavation shored? 21 0. 22 Just a regular shoring, aluminum shoring. Α. 23 Was it manhole box? There was individual hydraulic Q. 24 cylinders with wood, or how was it --25 Yeah, I don't recall. Α.

1 Ο. So, you don't recall how it was shored --2 Α. No. 3 Q. -- but you recall that it was shored. 4 Α. No, I don't recall. 5 Do you recall that it was shored, there was shoring in Q. 6 the hole? 7 Α. No. You don't recall that either? 8 Ο. 9 Α. No. Can you state what the minimum distance is, maximum 10 Ο. depth before shoring is required? 11 Five feet. 12 Α. 13 Were other utilities exposed by the excavation? Ο. 14 Not that I recall. Α. 15 Ο. What was the condition of the old sewer line exposed by 16 the excavation? I didn't examine the old sewer line for -- to see what 17 Α. condition it was. 18 19 Ο. What was the condition of the manhole exposed by the excavation? 20 21 Α. I didn't examine that, either. 22 Was the bedding sand or trench backfill for the gas line Ο. encountered by the excavation? 23 24 Α. Yes. 25 Was the westerly wall of the excavation used as a Ο.

1 reaction to pull the bursting head through the sanitary sewer 2 pipe?

3 A. The westerly wall of the excavation?

4 Q. Right.

5 A. Yes.

Q. Let me repeat that because earlier you said you don't
recall the shoring. So, I'm going to ask you the question again.
Was the westerly wall of the excavation used as a reaction to pull
the bursting head through the sanitary sewer pipe?

10 A. Yes.

11 Q. How long was the excavation open?

12 A. I don't recall.

13 Q. Was any water encountered during the excavation?

14 A. No.

15 Q. Were pumps needed to keep the excavation dry?

16 A. No.

Q. These are questions regarding activities performed during and shortly after the bursting operation. What material

19 was the new sanitary sewer line made of?

20 A. Polyethylene.

21 Q. What was the diameter of the new sewer line?

22 A. Ten inches.

23 Q. Okay. So, just to clarify, the original was six so you 24 went up from six to ten inch?

25 A. Ten inch OD.

1 Ο. Ten inch OD. In the vicinity of the gas line rupture, 2 where were the insertion and receiving pits located? 3 Α. The receiving pit was 300 feet from the, approximately 4 from the manhole that we excavated. 5 And the insertion pit? Ο. б Α. The insertion pit was 300 feet away from the manhole we 7 removed. 8 Ο. So, you pushed out and then pulled back? We didn't 9 explain how this whole process worked on the pipe. 10 Α. Yeah. 11 Q. So, you just said earlier that one of the pits used the 12 west wall --13 Yes. Α. 14 -- to pull back from. Ο. 15 Α. No, to pull down to. To pull down to. 16 Ο. 17 Α. Yes. 18 So, where was that pit? Q. The insertion pit? 19 Α. 20 The hole that used the westerly wall of the excavation Ο. 21 because it's coming from the west, correct? 2.2 The hole that we used for the pulling pit was in the Α. manhole that we removed. 23 Which is located next to the transmission pipe, is that 24 Q. 25 correct?

1 A. I don't know the location of the --

2 Q. Okay.

3 A. -- transmission pipe.

4 MR. CHHATRE: Off the record.

5 (Off the record.)

6 (On the record.)

7 UNIDENTIFIED SPEAKER: Okay. Back on the record.

8 MR. HARTY: Okay. So, what you're asking is where the 9 insertion pit was.

10 BY MR. FASSETT:

11 Q. Yeah, why don't we step back --

12 A. The insertion pit is --

13 Q. Well, wait a minute just a second. Can you just kind of 14 step back and explain the whole process then --

15 A. Okay. So, this is the manhole I explained to you 16 earlier, and I removed the manhole and set our wench up here and 17 pulled the pipe from 300 feet away down to Glendale.

Q. So, where was the head? Where is the percussion that was breaking the pipe and going from six inch to ten inch? That started --

21 A. Right here.

22 Q. -- in the east pit, or the west pit, actually.

23 A. Yes.

24 Q. And the wench is pulling that head toward --

25 A. The wench is set down here and it inserts here and it

1 comes out here.

2 0. Okay. So, what's the capacity on the wench? 3 Α. Ten tons. 4 Ο. It's a ten ton wench. 5 Ten or twelve. I'm not sure which one I used on that. Α. 6 0. And you were the one that was running the crew. 7 I was the job superintendent. I was in and out. I Α. actually don't remember being there at this particular time. 8 Okay. So, you weren't the job foreman, you were the 9 Q. 10 job --11 Α. No. 12 Q. -- superintendent. What was the size of the compressor 13 used? You said this is a pneumatic ramming device. What was the 14 size of the compressor required to power that head? 15 Α. Somewhere in the vicinity of 300 cfm. That might be a 16 little over rated, but --17 Well, I'll be --Q. 18 Α. -- the vicinity. 19 I'll be asking for the specific details, but --Ο. 20 Α. Yes. 21 Q. And then the head was, how big was the head? 22 The head was about 11 inches diameter, outside diameter, Α. 23 OD. 24 Q. And you're putting this in a 6 inch sewer, but what was the ID of the sewer? 25

- 1 A. The, of the existing sewer?
- 2 Q. The one you were breaking.
- 3 A. Six inch.
- 4 Q. That was the ID.
- 5 A. Yes.

6 Q. What data was collected during the pipe bursting?

- 7 A. Visual data.
- 8 Q. So, what are you looking for visually then?

9 A. Surface heaving, cracks in the asphalt.

- 10 Q. Was there any of that?
- 11 A. No.
- 12 Q. Is there any monitoring of the forces associated with 13 the utilities you may be crossing or going near?
- 14 A. No.

Q. Were there any impediments to the advancement -- to advance of the bursting head or any irregularities in the advance of the apparatus?

18 A. No.

19 Q. Was any ground lost into the burst pipe observed?

20 A. No.

Q. I think you already answered this, but what monitoring of conditions surrounding the sanitary sewer line was performed during the operation?

- A. Just visual.
- 25 Q. Documentation prepared?

1 Α. No. 2 Any unanticipated events? Ο. No. 3 Α. No. 4 Ο. Were procedures changed as a result of any of what you 5 saw? б Α. No. 7 During the process, were any photographs taken of the Ο. pipe bursting operation? 8 9 Α. No. 10 You weren't in the field you said, so, were there any Ο. unusual occurrences observed by your field personnel that was 11 12 related to you? 13 Α. No. 14 Were as-built drawings of the replacement sanitary sewer Ο. 15 line and/or adjacent utilities prepared? 16 Α. Yes. 17 Q. Okay. We'll be asking for copies of those. That's my 18 questions at this time. 19 MS. JACKSON: No questions. 20 MS. FABRY: One question for the -- my name is Klara 21 Fabry, San Bruno Public Services Director. 2.2 BY MS. FABRY: 23 John, you indicated that utilities were located through Q. 24 USA. 25 Α. Yes.

- 1 Q. You were aware of the results of the locate?
- 2 A. Aware of the gas line?
- 3 Q. Yes.
- 4 A. Yes.

5 MS. FABRY: I have no further questions.

6 MR. SHORI: Sunil Shori of the California Public 7 Utilities Commission.

8 BY MR. SHORI:

9 Q. For the equipment that was used you said the Hercules 10 equipment. Are there procedures that are provided either by the 11 manufacturer or created by your company for the use of that 12 equipment, and, also, just in terms of the work being performed? 13 So, just overall procedures, maybe equipment specific, as well as 14 procedures on performing that kind of a bursting activity.

15 A. Yes, by the manufacturer.

Q. Do you have any additional ones then beyond the manufacturer, procedures you've created yourself that either -any particular procedures you created in addition to those from the manufacturer?

20 A. No.

Q. The change order that was -- that we discussed earlier, can you explain to me how that works? So, you had, it sounds like you had an original contract that specified one of two methods that you could use to do the work that you were tasked to do. A. Yes.

Q. And then a change order came in and so what does a
 change order entailed and who issued it and how does that normally
 work? I'm not aware of that process.

A. The change order, it was for pipe bursting, X-amount of feet. I don't know exactly how many feet were on Earl Avenue, the pipe burst from 6 to 10 inch pipe on Earl Avenue, whatever point to whatever point.

8 Q. I guess that's what I'm trying to understand is you said 9 the original contract already gave you the option to either do an 10 open trench --

- 11 A. Yes.
- 12 Q. -- or do a burst.
- 13 A. Yes.

Q. What would be the need for the change order then to specify anything particular? Why would that be needed or why is that change --

- 17 A. It was --
- 18 Q. -- order needed?

A. It was just a written change order that said change
 order whatever number --

21 Q. Uh-huh.

22 A. -- the pipe burst from point A to point B.

Q. Okay. So, is that something then that would take away that option that you originally had and say this is what to be done --

1 A. Yes.

2 -- versus leaving it as an option from the original? 0. 3 Α. It's pretty -- it's leaving it -- it's a directive, a 4 direction on what to do. 5 MR. FASSETT: I just had a question to your question. 6 MR. SHORI: Yeah. 7 MR. FASSETT: Just a point of clarification. Can we go off the record? 8 9 MR. CHHATRE: Identify yourself first. Bob Fassett. Just so I understand the 10 MR. FASSETT: question. As I understood the change order, the Earl Avenue was 11 12 not part of the original project and the change order was to add 13 Earl Avenue, X-amount of feet to the original project. Is that --14 MR. HARTY: That's correct. 15 MR. SHORI: Okay. I'm glad we clarified that up. BY MR. SHORI: 16 17 So, this was an additional footage of work to the Q. 18 original project without necessarily changing the scope of the 19 terms of that original project. 20 That's correct. Α. 21 Q. Okay. And I think this may have been asked before, but 22 are there any pictures of the work that took place, either prior to, during, or after --23 24 Α. No. 25 0. -- on Earl Avenue?

- 1
- A. No.

2 And you also talked earlier about a manhole being Ο. 3 removed. So, we have two manholes per the drawing that you made 4 earlier. So, we've got the one on the west end --5 Α. Yes. б Ο. -- and then we've got the one that's on the corner of Glenview and Earl. What was replaced or what was removed, or 7 maybe clarify that for me if I'm --8 9 Α. All the manholes on the project were removed. 10 Ο. And replaced? And replaced. 11 Α. 12 Q. Okay. What USA notice was provided for this work? 13 The standard USA, call the USA and give, you know, they Α. 14 notify everybody. 15 Ο. I don't know if you have the number handy, but we 16 probably need that. 17 I, no I don't have it. Α. 18 Ο. We could look that up. Who normally provides the notice 19 for that -- for work for --20 Α. T do. 21 Q. You do. Were you informed by PG&E about the presence of 22 any high priority facilities --23 Α. Yes. -- in he proposed excavation area? 24 Q. 25 Α. Yes.

1 And is there any documentation of this or how do you Ο. 2 document that? Basically, overall how do you document your, once 3 you have the USA ticket, how do you document whatever correspondences you have between, you know, related to that ticket 4 5 between various parties as you -- for that work? 6 Α. Phone records. 7 Is there any written documentation of what's discussed? Ο. Normally, when I call USA, PG&E call me back --8 Α. 9 Q. Um-hum. -- and let me know that if there is high pressure or 10 Α. 11 something in the area to be aware of. 12 Q. Um-hum. 13 And that is usually in a fax form or a phone call or Α. 14 both. 15 Q. Um-hum. Do you recall what it was for this particular project for at least the portion that got added for Earl Avenue? 16 17 Α. No. 18 Were you informed by PG&E about any field meeting having Ο. 19 to take place? 20 Α. Yes. 21 Q. And do you recall if that was verbal or by fax? 2.2 By phone. Α. 23 By phone. Again, any documentation of that? Q. 24 Α. Just the -- I need to -- when PG&E contact me --25 Um-hum. Ο.

A. -- they got to have a representative there when I'm
 working close to the gas line --

3 Q. Um-hum.

A. -- and they need 48 hours notice. So, I called the number and set up when we're going to be doing our work so we'd have the PG&E inspector on site.

Q. Well, there'd be a two step process, right? First you
8 have to call the USA and --

9 A. Yes.

Q. -- you did that. After you called the USA, did you receive additional information from PG&E saying that they needed to do a field meeting with you or that they wanted to do anything further in regard to your proposed excavation?

14 A. Yes.

Q. And when did you get -- after you first called in your USA, when did you get that notification?

17 A. Usually within 48 hours.

Q. Okay. And so on that particular one, I just want to clarify again, what were you told in terms of any meetings having to take place, or what were you told when you heard back from PG&E?

A. That we got to have a PG&E inspector on site when we're working close to the gas line.

Q. Okay. And based on that notice, was there a PG&E inspector on site when you were doing the work?

- 1
 - A. Yes.

2 Q. Was that inspector there the whole time?

3 A. Yes.

4 Ο. Do you have any idea who the inspectors -- the name was 5 of the inspector that was there? Was there more than one? б Α. Just one. 7 And so when you say he was there the whole time this, Ο. can you describe to me the extent of his presence, I mean starting 8 9 with when -- let's just go all the way to opening the, whatever first hole you opened to where you closed up and left. How long 10 was that inspector there? 11

12 A. He was there during -- we potholed the gas main.

13 Q. Um-hum.

14 A. Dig on both sides and around and underneath.

15 Q. Um-hum.

16 A. And the PG&E inspector would be there while we were 17 doing that process.

18 Q. Okay. So, when you say potholed, you exposed which of 19 the -- which gas lines?

20 A. The high pressure gas main.

21 Q. How big of an excavation was that?

22 A. Approximately 4 feet either side of the gas main.

Q. So, earlier I think you were asked whether or not you exposed any nearby utility facilities, and I believe the answer was no. So, in this particular case you're saying you did expose

1 the gas main?

2 A. Yes.

Q. And at that point, were you exposed -- were you able to see where the sewer line was in relation to that opening?

5 A. Yes.

Q. And what was the clearance again in terms of what you could see through that opening? What was the clearance between the existing sewer main and the PG&E gas line. And again, I want to make sure, there are two gas lines in that area. Are we talking -- what diameter line are you referring to in this conversation?

- 12 A. The high pressure gas line
- 13 Q. Okay.

14 A. I'm not sure of the diameter.

- 15 Q. More than 12?
- 16 A. Yes.

17 Q. Okay. And that excavation stayed open the whole time 18 that you did your work?

19 A. Yes.

20 Q. And by the time you -- first of all, you could see the 21 existing sewer there?

22 A. Yes.

Q. And then after you'd done your bursting and replaced it
with your polyethylene, you could see the polyethylene afterwards?
A. Yes.

Q. Okay. Could you see if you had made any contact with the large diameter line? Was that visible through that excavation?

4 A. Yes.

5 Q. Had you made any contact with that large diameter line?6 A. No.

Q. Did you physically measure any separations between your
8 line and PG&E's line, or were these all approximated from above?

9 A. They were approximated from above. If I can back up. I 10 believe my foreman might have measured for the PG&E inspector the 11 distance.

12 Q. And who would that foreman be?

13 A. Jose Ornelas.

14MR. CHHATRE: This is Ravi. Can you please spell it?15MR. HARTY: Jose, J-o-s-e, Ornelas, O-r-n-e-l-a-s.

16 BY MR. SHORI:

Q. Do you recall there being any indications from PG&E's representative at the site in terms of your process or any difficulties or any -- were you given any directions not to do anything or any concerns expressed to you by that individual?

21 A. No.

Q. Did that individual understand what work you were doing? Was there any discussions between yourself and him in terms of what the scope of the work was and what you were doing and what equipment you were using?

- 1
- A. Yes.

2 Q. Is there any documentation of those kinds of3 discussions?

4 A. No.

Q. That excavation that exposed the large diameter line,
was there any shoring done on that in terms of the depth of that?
How deep was that excavation?

8 A. I would have to assume approximately 8 feet.

9 Q. And who performed that excavation to basically daylight 10 and expose that portion. And so you said it's about 8 feet deep 11 and what were the dimensions?

12 A. Four feet either side of the gas main.

13 Q. How far out?

14 A. Maybe 5, 6 feet either side of the gas main.

15 Q. Okay. How wide and how, so, how far away --

16 A. It'd be like 2 --

17 Q. -- from the outer edge of the main and how wide would 18 you say it was?

19 A. It'd be 2 feet wide.

20 Q. Two feet wide.

21 A. And 4 to 6 feet from the edge of the gas main in each 22 direction.

23 Q. Okay. So, 2 feet wide by 4 to 6 feet --

A. Each direction.

25 Q. Each direction

1 From each side of the gas main. Α. 2 And that afforded you still the ability to be able to Ο. 3 see the existing sewer line? 4 Α. Yes. 5 Ο. And how was that created? How was that excavation 6 created? 7 Α. By hand. 8 And that was 8 feet deep? Ο. 9 Α. Yes. I guess I'm just trying to understand how you'd get down 10 Ο. 6, 8 feet by hand when it's only 2 feet wide. 11 12 They would have had some assistance from a backhoe. Α. 13 Did that backhoe make any contact with the line while it Ο. 14 was being done? 15 Α. No. 16 Was PG&E's representative watching the backhoe? Who was Ο. 17 operating the backhoe? Was it you or PG&E? 18 Α. One of my employees. 19 Ο. Okay. 20 But PG&E's representative was there observing? Α. 21 Α. Yes. 22 Were you aware of any other facilities, other PG&E Ο. facilities in the area as well? 23 24 Α. Yes. 25 Did you expose those for any reason? Ο. Okay.

- 1
- A. No.

2 Q. And why not?

A. Most of the other ones are house services, which are very small in diameter and the depth of our sewer, we didn't feel that there was a need to expose the gas services.

6 Q. Okay. So, the only gas facility then that was exposed 7 was the large diameter gas main?

8 A. Yes.

9 Q. As part of the procedure on the use of that equipment, 10 is there any kind of sensing that's required by the manufacturer 11 in terms of impact, vibration, anything else that the manufacturer 12 specifies be monitored while the equipment is being used --

13 A. No.

14 Q. -- that you're aware of?

15 A. No.

Q. Did you daylight any other, other than the gas main that we just discussed, did you daylight any other facilities along Earl, not necessarily PG&E, but anybody else? So, any other bell holes created along between the two points where you entered and where you exited the head?

21 A. I would suspect that we potholed all the water mains.

22 Q. I think that's it for me for now. Thank you.

23 MR. SHORI: Thank you.

24 MR. KATCHMAR: Peter Katchmar with PHMSA, Pipeline and
25 Hazardous Material Safety Administration.

1

BY MR. KATCHMAR:

2 Q. John, thanks for coming in today.

3 A. Um-hum.

Q. I've just got some clarification questions, I think.5 Who was on site during this project from your company?

6 A. You want a list of employees or just who was running the 7 crew?

8 Q. Let me back up, John. How many employees did you have 9 on this change order job?

A. Normally, there would be between five and ten employees.
The exact number on this one, I'm not --

12 Q. Okay. Okay, thank you for that. Could you explain the 13 original project?

14 A. The original project was --

15 Q. Originally.

A. -- similar. It was the option open trench or pipe burst with some larger diameter pipes. I think maybe 12 and 14 inch, maybe larger.

19 Q. So, but was it in the whole development? What was the 20 contract for?

A. It was other parts of San Bruno, other areas, but it wassewer replacement.

23 Q. Okay. So, sewer replacement for --

24 A. Different areas in the City --

25 Q. And --

1	A.	of San Bruno.
2	Q.	do you know why these areas were chosen?
3	Α.	No.
4	Q.	Okay. So, they just said go in and
5	Α.	Replace X-amount of feet.
6	Q.	Okay. So, at some point in this process they added this
7	300 foot	section.
8	Α.	That's correct.
9	Q.	Did they explain to you why they wanted you to do that
10	300 foot	section?
11	Α.	The engineer told me in the wintertime the pipe diameter
12	they had	was too small and it was popping manholes.
13	Q.	Could you explain that?
14	Α.	It was getting too much ground water infiltration from
15	other pla	aces and the manhole lids were
16	Q.	Are these manholes sewer, sanitary sewer manholes?
17	Α.	Yes.
18	Q.	Okay. So
19		MR. CHHATRE: Can we go off the record just for a
20	second?	
21		(Off the record.)
22		(On the record.)
23		MR. CHHATRE: Back on the record.
24		BY MR. KATCHMAR:
25	Q.	Okay, John, which engineer told you to add this

1 particular 300 feet to your project?

2 A. Woing Wong.

3 Q. And who does he work with?

4 A. City of San Bruno.

5 Q. Can you spell his name?

6 A. I'm not too sure of the spelling, but I believe it's 7 W-o-i-n-g, W-o-n-g.

Q. Oh, okay. We got it. Okay. We know who that is. Okay. So, I guess what you're saying is that in the winter months, it's wet in the area and so there's -- I guess I'm trying to understand. This is a sanitary sewer, so it's a closed system, correct?

13 A. Yes.

Q. So, there's just too much volume in the pipe and it was
coming up through the manhole? Is that what you're telling me?
A. Yes. The pipe wasn't -- the pipe diameter was too small

17 to handle the volume --

18 Q. Okay.

19 A. -- in the wintertime. So --

Q. What does water have to do with this if it's a closed system? Why would it be different in the summer than it is in the winter?

23 MR. CHHATRE: Off the record.

24 (Off the record.)

25 (On the record.)

1 Back on the record. MR. CHHATRE: MR. KATCHMAR: All righty. Cancel that question. 2 BY MR. KATCHMAR: 3 4 Ο. When you were out there you said you saw the markings of 5 the two gas lines? There was a large diameter gas line and a б smaller diameter gas line that crossed within 10 feet of each 7 other? 8 Α. Yes. 9 Q. And you didn't pothole the other one? I don't recall potholing the other one. 10 Α. Okay. All right. I'm done. 11 Q. MR. GUNTHER: Karl Gunther, NTSB. Just a couple of 12 13 quick questions. 14 BY MR. GUNTHER: 15 Ο. When you did your pull on your polyethylene, did you use a weak link? 16 17 I don't know what a weak link. Α. 18 Ο. A weak link -- if you're pulling polyethylene, normally you'd put a weak link in the head of the chain so that if the pull 19 20 was so strong that it would break the polyethylene in half, the 21 weak link would break and then you could go ahead and you know 22 that you're pulling too hard. Did you monitor your pull strength 23 some other way? 24 Α. On the wench that we were using is how you monitor the -- it's a constant tension wench --25

1	Q. U	m-hum.
2	A	- and it gives you a read out on your tons.
3	Q. 0	kay. So, you were following that. You didn't use a
4	weak line.	
5	A. N	ō.
б	Q. W	eak link is another technique, that's all.
7	A. Y	es.
8	Q. W	hen you did your I assume you did butt fusions, it
9	was polyeth	ylene. Did you do those above the ditch and then use a
10	bead remove	r?
11	A. W	e fused it above the ditch in one long 300 feet length
12	and then ju	st
13	Q. 0	kay. That's the only questions I had.
14	М	S. MAZZANTI: No questions.
15	М	R. SPERRY: No questions.
16	М	R. NICHOLSON: No questions.
17	М	R. CHHATRE: I have a few questions. Javi Chhatre,
18	NTSB.	
19	В	Y MR. CHHATRE:
20	Q. I	'm going to go back and what I'd really like to do is
21	I'm going t	o draw two streets because the sketch you have done is
22	not really	clear to me. Maybe it is clear to everybody else. And
23	if you can	just show me on the sketch where your manholes were
24	done, where	those 4 x 4 holes were done, that would help me
25	understand.	So, if we could do that, and I'll ask questions with

1 reference to that sketch.

2 (Pause on the record.)

3 BY MR. CHHATRE:

Q. Now, based on that, if you can just show us where your holes were, where the manholes were, and how did the process you went through.

7 A. So, I believe the manhole, and all this is just from -8 O. That's fine.

9 A. -- my recollection.

10 Q. That's fine.

11 A. I believe the manhole was like here somewhere.

12 Q. Okay.

A. And the other manhole is here, and this was my insertionpit.

15 Q. If you can just write down that, please.

16 A. Insertion pit.

17 Q. Yeah. And that was -- what is the size of that

18 insertion pit?

19 A. Approximately 2 feet wide by 24 feet long.

20 Q. Two feet wide by twenty-four feet long?

21 A. Yes.

22 Q. Okay. Maybe we should that down. I can write --

23 A. That's approximate.

24 Q. Okay.

A. It goes on the depth, you know, it's normally about

2 Ο. Okay. 3 Α. -- to insert. So, it's a 2 feet diameter hole? 4 Ο. Two feet wide. 5 Α. б Q. Okay. 7 Α. Yes. And 24 feet long? 8 Ο. 9 Α. Yes. If you can just write that down, please. So, 10 Okay. Ο. that's insertion. And where's the other one? 11 12 Α. This one was what we called a receiving pit. The 13 manhole, we removed the manhole --14 Ο. Okay. 15 Α. -- which was approximately 8 x 8. 16 Um-hum. Okay. And that's a manhole? Ο. 17 Α. Yes. 18 Q. I'm not a civil engineer. 19 Α. Okay. So, if you'd write it down for me. Bear with me. Okay. 20 Ο. 21 So, can you explain briefly the process? Now, you inserted your 22 replacement pipe, or first the bursting, I'm mean, I'm trying to 23 understand the process --24 Α. Yes. 25 -- how you do it. So --Ο.

1

three times longer than the --

1 A. Okay. The first thing I done was I come and we potholed 2 the gas main --

3 Q. Okay. And where was that?

A. -- while we had the PG&E inspector on site --

5 Q. Okay.

6 A. -- you know to make sure we had clearance and everything 7 is where it's supposed to be.

8 Q. Okay.

9 A. Then we removed this manhole and we set up our wench, 10 pulled the cable through the existing pipe, tied on our new pipe 11 having excavated this, and pulled the new pipe through. We just 12 used the existing pipe as a host pipe to guide the new pipe.

Q. Okay. And that hole you drew on the 30 inch gas main --A. Yes.

15 Q. -- what are the dimension of that?

16 A. It's approximately somewhere I'd say 4 to 6 feet each17 side of the gas main.

18 Q. So, the hole exposed --

19 A. Yes.

20 Q. Could you see the gas main?

A. Did I see it?

22 Q. Yeah.

23 A. Yes.

Q. Okay. And now going back to your One Call, what is the term you use, USA --

- 1 A. Yes.

2	Q.	do you recall when that call was made or can the
3	record be	available when that call was made?
4	Α.	The only thing I have is a phone call.
5	Q.	Okay. Do you have
6	Α.	I do have the inspector's name and phone number.
7	Q.	If you can provide that to us.
8	Α.	The inspector, the on site PG&E inspector.
9	Q.	Please.
10	Α.	Yes.
11	Q.	Great. Thank you.
12	Α.	And all I can go back on then is phone records of when
13	we spoke v	with
14	Q.	If they are available, we'd like to get those.
15	Α.	Okay.
16	Q.	If you can just make a note.
17	Α.	Yes.
18	Q.	And when actually work was done?
19	Α.	When?
20	Q.	Can you remember the date?. If you know
21	Α.	Yes.
22	Q.	Okay.
23	Α.	Okay. We can I can look
24	Q.	Can you go right back
25	Α.	I'd have to go back and look in our diaries.

1 That is fine. Ο. 2 Our daily diaries. Α. 3 Ο. Do you recall if it was winter, summer, spring? If you 4 know, that is fine --5 Α. I'm thinking summer. б Q. Okay. 7 But --Α. But you do have your dates. That is fine. 8 Ο. 9 Α. Yeah. After the USA call and you said you got a call from PG&E 10 Ο. 11 saying --12 Α. Yes. 13 -- they would like to meet with you. Q. 14 Usually I get a call and a fax. Α. 15 Q. Okay. In -- for something like this. 16 Α. 17 And did the PG&E representative at the scene, do you go Q. 18 over with him what you are planning to do? 19 Α. Yes. Did you mention the burst test for him that you will be 20 Ο. bursting the whole pipe out? Was he aware of that? 21 2.2 But, yes, but we wouldn't be bursting underneath the gas Α. 23 main. 24 Q. So, you did not burst underneath the gas main. 25 When you push through to this point you turn off Α. No.

1 your hammer.

2 Q. Okay.

3 A. So, you'd have no vibration.

4 Q. Okay.

5 A. And you would just coast the rest of the way because 6 there's no ground movement.

7 Q. Okay. So how --

8 A. So, your wench will just pull it from here to here9 without any ground vibration.

Q. So, and again, bear with me. So, initially there's a

12 A. Yes.

13 Q. -- and you used the term, help me out on here. Was that 14 VCP?

15 A. Yes.

16 Q. What does that VCP stand for?

17 A. Vertifide [sic] clear pipe.

18 Q. I'm sorry, say it again? Vertifide

19 A. I believe it's Vertifide.

20 UNIDENTIFIED SPEAKER: Vitrified.

21 UNIDENTIFIED SPEAKER: Vitrified.

22 UNIDENTIFIED SPEAKER: Vitrified.

23 MR. HARTY: Vitrifide.

24 UNIDENTIFIED SPEAKER: V-i-t-r-i-f-i-e-d.

25 MR. CHHATRE: Okay.

1

MR. HARTY: Clear pipe.

2 BY MR. CHHATRE:

Q. Okay. And so for your work, the first thing you did was burst that old pipe, or how did the -- explain to me how the work proceeded?

A. It's all one process. Like I said, you set up your
wench here. You pull your cable through the existing pipe. You
tie on to this hammer that's run by air.

9 Q. Okay.

A. And it just bangs and the wench down here, the cable, it guides it, and it's just one long 300 feet piece of pipe, goes through the existing pipe and ends up, you know, right there. We turn off the air to stop the vibration and we just pull across into the --

Q. Okay. So, you have a, some sort of hammer that you are pulling through.

17 A. Yes.

18 Q. And right behind the hammer they'll be a new --

19 A. A new pipe.

20 Q. -- sewer pipe.

21 A. Yes.

22 Q. The whole thing is being pulled at the same time.

23 A. Yes. It's a hose like pipe that --

24 Q. Okay.

25 A. -- pulls right through.

1	Q.	And what time you and you said when you reach that
2	place, th	at 4 feet segment
3	Α.	Yes.
4	Q.	you stop jack-hammering.
5	Α.	Yes.
6	Q.	How did you remove the old sewer pipe then and inserted
7	the new p	ipe?
8	Α.	We had the old sewer pipe removed from that location
9	before we	started pulling up here.
10	Q.	And how do you do that?
11	Α.	This pipe?
12	Q.	Old sewer pipe.
13	Α.	Just by hand.
14	Q.	So, old sewer pipe is removed by hand?
15	Α.	Yes.
16		UNIDENTIFIED SPEAKER: Just around
17		MR. HARTY: Just on, yeah, on both sides and underneath.
18		MR. CHHATRE: Just for the record, let's just go off the
19	record he	re for a second.
20		(Off the record.)
21		(On the record.)
22		UNIDENTIFIED SPEAKER: Back on the record.
23		MR. CHHATRE: Back on the record.
24		BY MR. CHHATRE:
25	Q.	Now, the PG&E person who was there, did he observe the

1 entire process --

2 A. Yes.

3 Q. -- including the manual removal of the old pipe?

4 A. I can't say that.

5 Q. But he was there. He was --

6 A. He was there.

7 Q. What time did he leave?

8 A. I can't say that either.

9 Q. And how long the operation took from start to finish? 10 A. Going back on my records, I believe it was a long day, 11 that the whole operation between bypass pumping and everything was 12 like a ten hour day.

Q. Ten hour day. That includes digging of the manholes?A. Yes.

15 Q. Now, the manholes, were they dug using some sort of a 16 mechanical equipment?

17 A. Yes, a backhoe.

18 Q. And where was the backhoe sitting?

A. I would -- now, again, I can't really say, but I wouldthink that a backhoe would be sitting here or here or here.

Q. Let me rephrase the question. Was the backhoe any way close to the gas main?

A. Well, there's only -- there's like 12 feet between the
manhole and the gas main, so, of course, it's going to be close.
O. So, it will be around 12 feet or closer?

1 That's what your drawing says. Α. 2 Okay. And you said the foreman on the job might have Ο. 3 the finical measurements for the separation between the gas main 4 and your sewer line? 5 Α. Yes. 6 0. He's a gentleman who is working --7 Α. Yes. 8 -- for you. Ο. 9 Α. Yes. 10 MR. CHHATRE: Off the record, please. 11 (Off the record.) 12 (On the record.) 13 MR. CHHATRE: Back on the record. 14 Let me yield to CPUC. Go, ahead, Sunil. 15 BY MR. SHORI: 16 Just in terms of any --Ο. 17 MR. SHORI: Sunil Shori, California PUC. BY MR. SHORI: 18 19 Any of the questions or any of the measurements that Ο. would have been taken, why wouldn't they be with the job file or 20 21 would they be with the job file? 2.2 They're more in the foreman's diary if he has them. Α. The only thing regarding the job file would be the sewer. 23 24 Q. And as far as the excavation pit that's dug over the 25 line --

- 1
- A. Yes.

2 Q. -- who determined where that was going to take place and 3 the dimensions of it?

4 A. I do.

Q. And in this particular case, how did you -- what was the basis for that location, basis of where you dug? How did you determine where to dig it?

A. After PG&E come out and located their gas main, and then 9 my conversation with the PG&E inspector, then I determined that 10 this is the best location. I try to excavate where I'm going to 11 be right at the point of where we're going to be crossing.

Q. And is that basically a string line between where you're entering versus where you're exiting? So, how would you determine what the angle -- how would you determine the angle of that excavation?

16 A. This is a straight line from here to here.

Q. And then you said you stopped the boring head or the pneumatic portion of the head so many feet west --

19 A. Yes.

Q. Okay. And you got there. So, is that to say then based on the excavation that you have plus the fact that you'd removed the manhole, so from that moment all the way to your receiving point it's an open trench for you?

A. Yes. We stopped the vibration, the head, about 8 feet out as soon as the front of the head comes in, the pipe bursting

1 is going to go to the easiest resistance. So, from 7 or 8 feet 2 out instead of pipe bursting the old, breaking the old VCP pipe, 3 it's just going to bring it all forward --

4 Q. And it's --

5 A. Because it's --

6 Q. -- larger diameter than what's there?

A. -- resistance. It's easier than trying to push it out
8 into the ground.

9 UNIDENTIFIED SPEAKER: That make sense.

10 MR. HARTY: So, we turn it off 7 or 8 feet as soon as 11 the pipe starts moving, we turn it off 7 or 8 feet back from this 12 excavation. And the guys are in here and they just throw out 13 the --

14 BY MR. SHORI:

15 Q. So, we're not --

A. Throw out the VCP and the dirt as it comes forward.
Q. I apologize. I didn't mean to cut you off. So,
basically, you're not just stopping the head as the percussion
comes through, your -- the west edge of your excavation, you're
saying you would stop the head even --

21 A. Yes.

22 Q. -- even while it's subsurface west of that point.

23 A. Seven to eight feet.

24 MR. CHHATRE: Let's go off the record.

25 (Off the record.)

1 (On the record.)

2 MR. CHHATRE: Back on the record.

3 MR. DAUBIN: Brian --

4 MR. CHHATRE: PG&E.

5 MR. DAUBIN: Brian Daubin, PG&E.

6 BY MR. DAUBIN:

Q. Based on your description there, are there two excavations essentially? Is there one for the gas line and then one for your pit?

10 A. Yes.

11 Q. And so as you exit -- as you enter the excavation for 12 the 30 inch high pressure main, you turn the head off --

13 A. Yes.

Q. -- and come through. Do you turn it back on as you go through the, what would be the gap between the two excavations, that last wall?

17 A. No, because that is so minimal.

18 Q. Okay.

19 A. That's probably only 5 or 6 feet.

20 Q. So, there's 5 or 6 feet between the excavations?

21 A. Yes.

22 Q. Okay.

A. Maybe more. I'm not sure what that measurement is.
MR. SHORI: Sunil Shori, California PUC.

25 BY MR. SHORI:

1 So, that 5 or 6 feet then, that's remaining, how is that Ο. 2 How do you pull that out? removed? 3 Α. How is the pipe removed? Well, the existing pipe. How is the existing pipe 4 Ο. 5 removed? б Α. If we stop 7 or 8 feet here and this pipe is coming 7 forward, then our wench is just, it's called like a static pull then. It just pulls it all into this pit. 8 9 Q. Okay. So, it pulls that remaining piece into your open 10 pit --11 Α. Yes. 12 -- and what, you just break it in pieces? Q. 13 It just chews up with the cable. It just breaks up and Α. 14 we remove it. 15 Q. Is that a normal procedure then when you cross an 16 existing line or was that done specifically in this case? 17 Α. That is normal procedure for crossing high pressure gas 18 mains. 19 Ο. So, there may be other facilities where you don't do 20 that, where you don't stop the head. 21 Α. It's --22 Basically, you run the whole thing through. Ο. It's a field call. With a lot of the water mains, we 23 Α. 24 pothole a lot of the water mains and maybe just put a foot 25 clearance between in case there's ever -- in case there's ground

1 movement.

2 Q. Thank you.

3 MR. CHHATRE: Ravi Chhatre, NTSB.

4 BY MR. CHHATRE:

Q. During the meeting with PG&E representative, at the time when the work was done, was he there from the beginning? Did he show up when the work was going on or he was there before the work started?

9 A. He was there during the work and the backfill of the gas 10 main.

Q. Okay. Do you, as a standard practice, do you have work procedure for each job for the foreman to follow?

A. I usually walk the foreman through the job, either in the morning or the day before, the entry pit, the exit pit. You need to do this. You need to pothole the gas main. PG&E inspector is coming out and, you know, I go through the procedure.

17 Q. Is that some sort of a verbal or written or --

18 A. Just verbal.

19 Q. Just verbal.

20 A. Yes.

Q. And let me just backtrack here just for a second. And what's your title with the company? Are you the owner or --

23 A. Yes.

24 Q. You are the owner.

25 A. I'm vice president, yes.

1 Vice president and owner? Ο. 2 I'm -- no, no. I'm 50 percent owner. Α. 3 Q. Fifty percent owner. 4 Α. Yes. 5 And how big is the outfit? How many employees? Q. 6 Α. Maybe 20. 7 The foreman on the job at the time of the, this Ο. particular job, was he a permanent employee? 8 9 Α. Yes. And were there any other contract employees on the job 10 Ο. or they're all your permanent employees? 11 12 Α. Yes. 13 And how many were working on that job from your company? Ο. 14 Somewhere between 5 and 10. I'd have to check the Α. 15 payrolls. 16 Okay. During the job, did PG&E inspector, did he say Ο. 17 anything to you? You're doing okay. Do this. Do that. 18 Α. In speaking with my foreman, I believe he did ask him to 19 patch where the -- a guy nicked it with a shovel and he gave him the material and asked him to patch the gas. 20 21 Ο. The coating. 22 Yes, oh, patch the coating. Α. 23 Q. Coating. 24 Α. Yes. 25 And do you have any record of that as to where Ο. Okay.

1 the nick occurred?

2 A. I believe it was on top somewhere.

3 Q. Okay. And did the PG&E employee, did he inspect the 4 repair work?

5 A. Yes.

6 Q. Did he say -- did he make any comment that it was okay 7 or --

8 A. Not that I'm aware of.

9 Q. Okay. Did PG&E employee do any measurements to your 10 knowledge?

11 A. I'm not aware of any.

12 Q. Did the PG&E employee express any concerns about the 13 pipe, about the new sewer pipe and the gas main?

A. I believe he asked my foreman the distance between the lines and made some phone calls regarding the closeness and asked him to place something between the gas line and the sewer line.

17 Q. I'm sorry, repeat that again, please.

A. Asked him to place like 2 x 4's or something between thegas line and the sewer main.

20 Q. So, he made phone calls first --

21 A. Yes.

22 Q. -- to somebody in PG&E.

23 A. Yes.

24 Q. And then asked you to put 2 x 4's underneath --

25 A. Yes.

1 Q. -- the gas main? Did he direct where those 2 x 4's
2 should be?

3 Α. On top of the sewer main. On the top of the sewer main. 4 Ο. 5 Α. Yes. 6 0. Okay. And at what time those 2 x 4's were removed? 7 They were not removed. Α. 8 They are not removed. Ο. 9 Α. No. 10 So, they just stayed in place between the sewer line, Ο. 11 new sewer line and gas main? 12 Α. Yes. 13 We might make a decision to call your foreman for Ο. 14 interview, but -- and we'll let you know our decision, but in the 15 meantime, will you please make a note and forward his notes for 16 this job that he may have or the measurements if -- regarding any 17 meeting, any procedures, any document that he may have, to my 18 attention.

19 A. Can you --

20 MR. GOODMAN: Yeah. So, when we're done here, I'll make 21 sure that -- I'm not sure this is recording, I'll make sure I have 22 a list of everything you want and where you want me to send it or 23 to whom --

24 MR. CHHATRE: Okay.

25 MR. GOODMAN: -- and I'll get, whatever it is you want,

1 I'll get it to you.

2 And who's speaking? MR. CHHATRE: 3 MR. GOODMAN: Thank you. Joshua Goodman, counsel for 4 Darcy & Harty. 5 MR. CHHATRE: Thanks. 6 MS. FABRY: Ravi --7 MR. CHHATRE: Off the record, please. (Off the record.) 8 9 (On the record.) 10 MR. CHHATRE: Back on the record, please. BY MR. CHHATRE: 11 12 Q. How the job was closed? When you are done with your 13 job, what is the procedure where you say, okay, I'm done? 14 We air test the sewer lines and TV the -- we air test Α. 15 and TV'd the sewer lines. 16 I'm sorry, I don't quit get it. Ο. 17 When, to close out the job, after the pipe is put in and Α. 18 all the houses are reconnected and all the paving is done, then we 19 air test the sewer lines to make sure that the, you know, that there's no leaks, and we TV the sewer lines. 20 21 Q. I'm sorry, I --TV. 2.2 Α. 23 UNIDENTIFIED SPEAKER: It's a camera. 24 MR. CHHATRE: Oh, camera. 25 BY MR. CHHATRE:

- 1 Q. TV camera.
- 2 A. TV camera. Yes.

3 Q. Okay. And you pass that through your line?

4 A. Yes.

5 Q. And is that record kept --

6 A. Yes.

7 Q. -- with you?

8 A. Record, and the City has a record, too.

9 Q. Okay. All right.

10 MR. CHHATRE: And I want to make a note of that, also, 11 that we may require the City, in fact, we do require the City.

- 12 BY MR. CHHATRE:
- 13 Q. Now, does somebody from City come see and says, okay, 14 the job is done?
- 15 A. Yes.

16 Q. Who does the paving and who closes the manholes and --

17 A. My employees.

18 Q. And do you get any document from the City saying, okay, 19 this particular job is finished to their satisfaction?

A. Not -- pretty much when you get your final payments.

- Q. Okay. But does a City inspector come in and look at the job?
- A. Oh, yes, and gives you a punch list.

24 Q. Okay.

25 A. And if everything is just, you know, normally there's a

punch list that you just -- to finish the project out. 1 2 And do you have this -- do you have a copy of a punch 0. 3 list, or the City keeps it? 4 Α. In some cases there might be no punch list. 5 Q. Okay. б Α. So, I'm not aware if -- of any punch list on this 7 project. 8 If you would, please, check your records and if Ο. Okay. 9 there is a punch list, we'd like a copy of that. 10 Α. Okay. Was the City inspector an engineer or was he or she on 11 Q. 12 the job all the time while you were doing the work? 13 Α. No. 14 Were they any time at the site when you were doing the Ο. 15 work? 16 I would say 60 to 80 percent of the time. Α. 17 Did that include the starting of the job and finish, or Q. 18 not? 19 Α. Yes. Yes, meaning they were there at the starting --20 Ο. 21 Α. They were they. -- and at the finish? 22 Ο. 23 Yes. Α. 24 Q. Okay. Do you recall who the City person was? 25 The person I was dealing with was, the City engineer was Α.

1 Woing Wong.

2	Q.	Okay. But that's the person you are dealing with for
3	the paper	work. Who was on the scene on behalf of the City at the
4	beginning	of the job and at the finish of the job?
5	Α.	I believe it was Woing Wong
6	Q.	Okay.
7	Α.	was the, he done most of the inspecting. There
8	was	
9	Q.	Do you know
10	Α.	another City inspector.
11	Q.	Do you recall any water line in that ditch that you
12	excavated	for the gas line?
13	Α.	No.
14	Q.	Do you know there was water line in there?
15	Α.	No.
16	Q.	So, nobody from the water came and marked the line when
17	you made	that USA call?
18	Α.	Oh, yes.
19	Q.	So, they marked the water line.
20	Α.	Yes.
21	Q.	Did it cross, those markings, did it cross anywhere near
22	the work	you are doing?
23	Α.	I'm sure it did, but I don't remember it crossing, but
24	I it o	bviously crossed at some point.
25	Q.	But you didn't see it in your ditch that you dug above

1 the gas line.

2 A. No.

Q. You did not see it in those, I guess manhole pit and the4 other pit that you dug.

5 A. I don't recall seeing it.

6 Q. Okay. That's all I have. Thank you so much for the 7 information. Clarified a lot of things for me.

8 UNIDENTIFIED SPEAKER: I have no questions right now.9 Thank you.

10 MR. CHHATRE: Let's go back for follow-up questions and 11 let's keep those very brief if we would, please, for the sake of 12 time.

MR. CALDWELL: Geoff Caldwell, City of San Bruno. No questions at this time.

MR. DAUBIN: Brian Daubin, PG&E. No questions at this time.

MR. FASSETT: Bob Fassett, PG&E. I have a couple ofquestions.

19 BY MR. FASSETT:

20 Q. How did you backfill and with what around the crossing 21 of the sewer line and the gas transmission line?

A. I'm not sure if it was called for sand around the gas line or class 2 base rock, and it would have been used with a hand tamper.

25 Q. Around the sites, but underneath the invert where the

1 sanitary sewer crossed under the gas main, how did you get that
2 compaction?

A. Normally, that would be packed with drain rock.
Q. You're saying normally. So, you didn't witness it.
A. No.
Q. You're saying that would be the normal. You said that
7 PG&E, there was a PG&E observer there. My understanding is

8 potholing was one day and the bursting of the pipe was a different 9 day. Was the PG&E employee there for both the potholing and the 10 pulling back, or was that all one day?

11 A. I'm not sure if the potholing was one day and the 12 pulling the pipe was one day or if everything occurred on the same 13 day.

14 Q. So, you don't know if the PG&E employee observed both 15 the potholing and the bursting of the pipe?

16 A. No.

17 Q. No, you do not know that.

18 A. No.

19 Q. It was mentioned earlier that there is a discussion 20 about the pipe bursting process with the PG&E employee, is that 21 correct?

22 A. I'm just assuming that there was.

Q. So, the discussion around the pipe bursting, what it does, concerns, that kind of thing, you're not sure if it was done with a PG&E employee?

- 1
- A. I'm assuming it was.

2 Okay. And so are you also assuming that that PG&E 0. 3 employee was an engineer or was someone that observes potholing of the pipes? 4 5 Α. I just know he was a PG&E --6 Q. Employee. 7 -- inspector sent out to observe our work. Α. MR. CHHATRE: Off the record, please. 8 9 (Off the record.) 10 (On the record.) MR. CHHATRE: Back on the record. 11 BY MR. FASSETT: 12 13 Ο. What was the distance between the west wall of the pit, 14 the east pit that you show up there and the side of the transmission line? 15 16 Again, I'm guessing 5 to 6 feet. Α. 17 Q. Those were my questions. Thank you. 18 MS. JACKSON: No questions. 19 UNIDENTIFIED SPEAKER: No questions. 20 UNIDENTIFIED SPEAKER: Off the record. 21 MR. CHHATRE: Off the record, please. 2.2 (Off the record.) 23 (On the record.) 24 MR. CHHATRE: Back on the record. 25 MS. FABRY: Klara Fabry, San Bruno. One follow-up

1 question.

2	BY MS. FABRY:
3	Q. You indicated that you don't have precise recollection
4	when the PG&E inspector was on the job, on the jobsite or watch
5	the City operation portion of the work. If you did anything on
6	the project without to have the inspector on the job, was based on
7	your discussion with the inspector but he has to witness, or how
8	you made that determination when you could do anything having the
9	inspector, PG&E inspector on the job or not?
10	A. My recollection is any time when we're working close or
11	around the gas main that the PG&E inspector was on site.
12	Q. Thank you. And you indicated that you (indiscernible)
13	Woing Wong, but also you mentioned that the City inspector was on
14	this job, also. By any chance
15	A. There was a City inspector and he worked more directly
16	with my foreman.
17	Q. Thank you. No more questions.
18	MR. SHORI: Sunil Shori, California PUC.
19	BY MR. SHORI:
20	Q. Who had the original contact with PG&E's representative
21	after you basically had sent out the USA ticket and you were
22	contacted back by PG&E, who had the original discussions? Was it
23	you or your foreman with PG&E after that point, after the USA $$
24	ticket having been sent out?
25	A. I believe I set up the initial contact with the PG&E $\$

1 inspector, got his cell phone number, and gave his cell phone 2 number to my foreman so they could coordinate the work in the 3 field.

Q. But as far as discussions beyond that point, beyond coordinating and facilitating for the foreman to be able to speak with PG&E, did you, yourself, have any discussions with PG&E's representative?

8 A. Not that I recall.

9 Q. Did your foreman, after he had spoken with PG&E's 10 representative, convey anything back to you in regard to 11 discussions he had had with PG&E. So beyond -- basically, what 12 I'm asking for is beyond that point, did you have any information 13 in terms of what PG&E required or what PG&E was asking your 14 foreman to do or your crew to do on that job?

- 15 A. No.
- 16 Q. Thank you.

17 MR. NICHOLSON: I've got a -- Matt Nicholson, NTSB.

18 BY MR. NICHOLSON:

19 Q. I've got a clarification question for you. This hammer, 20 this pneumatic hammer we're talking that burst the pipe, the 21 question was asked earlier what size compressor was used.

22 A. Yes.

Q. And I believe the answer that came back, I thought Iheard, is 300 cfm.

25 A. Yes.

1 So, it's rated by volumetric flow, not pressure? Ο. 2 It's rated, the hammer is rated pressure, psi, and cfm, Α. 3 cubic --4 Ο. What is the pressure? 5 Cubic foot per minute. Α. 6 Q. Right. What is the pressure at that flow? 7 I believe the hammer runs somewhere between 100 and Α. 8 120 psi. 9 Q. Okay. That's all I have. MR. SHORI: Ravi, may I ask one more follow up? 10 Sunil Shori, California PUC. 11 BY MR. SHORI: 12 13 Earlier when we were having the discussion about where Ο. 14 the pneumatic head was, a pneumatic function was stopped and then 15 the rest of it was, I forget the term, static pull --16 Α. Static. 17 -- were you there at that point when that head was Q. 18 stopped, or is that your, again, you're assuming that that's what took place? 19 20 Yes, I'm assuming that's what took place. Α. 21 Q. But you weren't, I mean, at the conclusion of that --I --22 Α. 23 -- jobsite how -- during that entire portion of that Q. 24 job, how long were you on site? 25 I don't recall actually being on site when they were Α.

1 pulling that section of pipe.

2 Were you there for the excavation at all? Ο. 3 Α. I may have been. I'm in and out. I visit the jobsite 4 maybe three times a day. 5 All right. Thank you. Ο. 6 MR. CHHATRE: Ravi Chhatre, NTSB. 7 BY MR. CHHATRE: 8 Ο. How many jobs that your company you have done that 9 involve gas lines, high pressure gas lines in the past? I couldn't say that. There's numerous. 10 Α. Let me rephrase the question then. Have you done any 11 Q. 12 jobs of this directional pulling that were close to natural gas 13 main, high pressure natural gas main? 14 Α. Yes. And when can your foreman be available for interview? 15 Q. He's out of town right now, but I can have him available 16 Α. 17 if you can -- a couple of day's notice is what I'd like to have --18 Q. Okay. 19 Α. -- to get him. 20 Well, we are going to be here through at least Thursday, Ο. 21 maybe Friday. If you can see when he can come in. Today is 22 So, maybe by Wednesday if we can --Monday. 23 Well, if you can give me a time and a date. Α. 24 Q. We can do that. 25 And then --Α.

- 1 Q. Wednesday a day that would work for you.
- 2 A. And, you know --
- 3 Q. Okay.
- 4 A. -- and I can work with that.
- 5 Q. Okay.
- 6 A. It's just he's on a project --
- 7 Q. We'll --
- 8 A. -- out of town right now.

9 Q. We'll work with City for that and City will contact.

10 MR. GOODMAN: All right. So, who should, since I'll

11 probably be the go-between, who should I deal with in terms of --

- 12 MR. CHHATRE: You should be dealing with City.
- 13 MR. GOODMAN: Okay.

14 MR. CHHATRE: And City will deal with us.

15 BY MR. CHHATRE:

Q. With that ditch again on the gas pipe, was it done all the way through so that you can expose the gas pipe from the bottom, also?

19 A. Yes.

20 Q. You could see the bottom and the top.

21 A. Yes.

22 Q. And that's where your 2 x 4's or 4 x 4's were?

23 A. Yes.

Q. And you said those were never pulled out. So, any packing you did was it, were those 4 x 4's in place?

1 Α. That was at a PG&E request. 2 Okay. And that's all for me. Thank you. Ο. 3 UNIDENTIFIED SPEAKER: Can we go off the record for a 4 second? MR. CHHATRE: Off the record. 5 6 (Off the record.) 7 (On the record.) MR. CHHATRE: Back on the record. 8 9 BY UNIDENTIFIED SPEAKER: Here's the following acronyms that we'd just like to 10 Ο. have entered into the record. There's ID. If you're comfortable 11 with that, that's fine. If you know what ID is. 12 What is --13 Α. 14 What is it? Ο. 15 Α. -- ID. Oh, you need the ID of the --16 What does that mean? Ο. 17 Α. Oh --18 UNIDENTIFIED SPEAKER: Inside diameter. 19 MR. HARTY: Out -- inside, yes. 20 UNIDENTIFIED SPEAKER: That's -- is OD --21 MR. CHHATRE: Excuse me. Before you speak, please state 22 your name because otherwise nobody will know. Okay. 23 BY UNIDENTIFIED MALE: 24 Q. OD? Outside diameter. 25 Α.

1 Q. USA.

2 A. Underground Service Alert.

3 Q. psi.

4 A. Pounds per square inch.

5 Q. Punch list.

6 A. The punch list is a list of items you get at the end of 7 the job to close out the job.

8 Q. Okay.

9 A. Punch --

10 Q. And I believe that Mr. Nicholson referred to this, but 11 I'll ask again, a cfm again stands for?

12 A. Cubic foot per minute.

13 Q. Okay. Thank you.

14UNIDENTIFIED SPEAKER: I believe that's all, unless15anybody had any other acronyms that they picked up. Thank you.

16 MR. CHHATRE: Thank you so much for your help.

UNIDENTIFIED SPEAKER: Before we go off since this is
probably going to be my task, I just want to make sure --

19 MR. CHHATRE: Okay.

20 UNIDENTIFIED SPEAKER: -- that I have it all. So, in 21 terms of documents, you'd asked for the punch list, you'd asked 22 for phone records showing calls to USA or PG&E. You'd asked for 23 any records of any measurements of the distance between the sewer 24 and the gas pipe. I don't think there are any, but I will 25 obviously look, and if there are any --

1 MR. CHHATRE: Okay.

2 UNIDENTIFIED SPEAKER: Or any records, I think you asked 3 for records of the dates on which the work was performed.

4 MR. CHHATRE: Correct. Was there -- is there anything 5 I'm -- that was asked for that was missing?

6 UNIDENTIFIED SPEAKER: Well, I had asked if there's any 7 discussion records of discussions between the company and PG&E.

8 UNIDENTIFIED SPEAKER: Okay.

9 UNIDENTIFIED SPEAKER: In regard to the work being done 10 or their standby or anything else.

MR. GUNTHER: Also, if we could get a copy of his foreman's notes.

13 MR. CHHATRE: That would be Karl Gunther, NTSB.

MR. GUNTHER: Right. Yeah, if we can get a copy of the foreman's notes and preferably before we do the interview, that could be really, really helpful.

17 UNIDENTIFIED SPEAKER: Foreman's notes.

18 MR. GUNTHER: And enough copies for each of the parties19 to have one.

20 UNIDENTIFIED SPEAKER: Whatever you want. So, do you 21 want me -- do you want me to send them all to you, and --

22 MR. CHHATRE: If there are, yeah, give me all the 23 copies. If there are any names, then we may have to redact those. 24 UNIDENTIFIED SPEAKER: I think the only issue that any 25 of this that could conceivably have a privacy issue are the phone

MR. CHHATRE: Okay. Get all the sets to me and then we'll take care of it before we distribute them. MR. HARTY: There was a USA number. UNIDENTIFIED SPEAKER: The USA number. Okay. That's right.

7 UNIDENTIFIED SPEAKER: Well, beyond just the number, if
8 we can have the USA ticket? I mean, basically --

9 MR. CHHATRE: Off the record, please.

records. I don't think the rest of this --

10 (Off the record.)

11 (On the record.)

12 MR. CHHATRE: Back on the record again.

13 I really want to thank you so much. It clarified a lot 14 of things for me. Thank you for your time and effort.

15 MR. HARTY: Okay.

16 MR. CHHATRE: We appreciate it.

17 MS. FABRY: Javi, just off the record.

18 MR. CHHATRE: Off the record.

19 (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: PACIFIC GAS & ELECTRIC COMPANY SEPTEMBER 9, 2010 ACCIDENT SAN BRUNO, CALIFORNIA Interview of John Harty

DOCKET NUMBER: DCA-10-MP-008

PLACE: Burlingame, California

DATE: January 3, 2011

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

> Mary Anne Jones Transcriber