Docket No. SA-534

Exhibit No. 2-BF

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

INTERVIEW OF DENNIS BOSCH, CITY OF SAN BRUNO
(JAN-3-2011)

(34 Pages)

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:	*	
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PACIFIC GAS & ELECTRIC COMPANY	*	
SEPTEMBER 9, 2010 ACCIDENT	*	Docket No. DCA-10-MP-008
SAN BRUNO, CALIFORNIA	*	
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Interview of: DENNIS BOSCH

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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I N D E X

I N T E R V I E W

MR. CHHATRE: Good afternoon. Today is Monday, January 3rd, 2011. We are currently in Burlingame, California at the San Francisco Airport Marriott. We are meeting in regards to the investigation of the pipeline rupture in San Bruno, California that occurred on September 9th, 2010. The NTSB accident number for this investigation is DCA-10-MP-008. My name is Ravi Chhatre. I am with the National Transportation Safety Board in Washington, D.C. and I'm the investigator-in-charge of this accident.

I would like to start by notifying everyone present in this room that we are recording this interview for transcription at a later date. All parties will have a chance to review the transcripts when they are completed.

Also, I would like to inform Mr. Dennis Bosch, is it --

MR. BOSCH: That's right.

MR. CHHATRE: -- that you are permitted to have one other person with you during this interview. That person will be of your choice. It can be a supervisor, a friend, a family member or, if you choose, nobody at all.

Please state for the record your full name, spelling of your name, contact information, such as phone number, e-mail and postal mailing address, and whom you have chosen to be present with you today during the interview.

MR. BOSCH: The gentleman sitting to my right.

MR. HARRIS: My name is John Harris. I'll be

representing Mr. Bosch at this proceeding.

MR. BOSCH: And my name is Dennis Vincent Bosch, D-E-N-N-I-S, middle name Vincent, V-I-N-C-E-N-T, last name Bosch, B-O-S-C-H. I'm with the City of San Bruno, Public Services, Wastewater Collection Manager. My mailing address -- is the City of San Bruno fine or do you wish my personal address?

MR. CHHATRE: No, office address is fine.

MR. BOSCH: 567 El Camino Real, E-L, next word Camino, C-A-M-I-N-O, next word Real, R-E-A-L, City of San Bruno, California 94066.

MR. CHHATRE: Okay. Now I'd like to go around the room and have each person introduce themselves. Please state your name, spelling, and the title and organization that you represent, e-mail and phone number. We'll start with the City of San Bruno.

MR. CALDWELL: City of San Bruno. My name is Geoff Caldwell, G-E-O-F-F, C-A-L-D-W-E-L-L. My e-mail is gcaldwell@sanbruno.ca.gov. The phone number is 650-616-7100.

MR. DAUBIN: Brian Daubin, Pacific Gas and Electric, engineering manager for Engineering and Support Services. E-mail is bmd5@pge.com. Phone is 925-783-3622.

MR. FASSETT: Bob Fassett, PG&E, NTSB party representative. For other details, please see the card I provided earlier.

MS. FABRY: Klara Fabry, K-L-A-R-A, F-A-B-R-Y, San Bruno Public Services Director, kfabry@sanbruno.ca.gov. Phone number is

650-616-7065.

MR. SHORI: Sunil Shori. I'm with the California Public Utilities Commission, utilities engineer. My phone number is 415-703-2407. My e-mail is SKS@cpuc.ca.gov.

MR. KATCHMAR: Peter Katchmar, United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration, and I, too, gave a card.

MR. GUNTHER: Karl Gunther, NTSB, K-A-R-L, G-U-N-T-H-E-R. E-mail is karl.gunther@NTSB.gov. Phone is 202-314-6478.

MS. MAZZANTI: Debbie Mazzanti, M-A-Z-Z-A-N-T-I, International Brotherhood of Electric Workers, djmg@ibew1245.com.

MR. SPERRY: Joshua Sperry with the Engineers and Scientists of California, Local 20, IFPTE. It's Joshua J-O-S-H-U-A, Sperry, S-P-E-R-R-Y. I turned in my business card.

MR. NICHOLSON: Matthew Nicholson, M-A-T-T-H-E-W, N-I-C-H-O-L-S-O-N, Engineer, NTSB. I can be reached at matthew.nicholson@NTSB.gov.

MR. CHHATRE: Ravindra Chhatre. That's R-A-V-I-N-D-R-A, C-H-H-A-T-R-E. I'm with the National Transportation Safety Board, investigator-in-charge for this accident. My phone number is 202-314-6644. E-mail is ravindra.chhatre@NTSB.gov.

MR. NARVELL: Rick Narvell, N-A-R-V-E-L-L, Human Performance Investigator, NTSB. E-mail is narvellr@NTSB.gov. Phone is 202-314-6422.

MR. HARRIS: Again, John Harris, law firm of Meyers,

Nave. My address is on the card I submitted to the investigator-in-chief. My phone number is 213-626-2906.

MR. CHHATRE: Okay. Let's begin with Karl Gunther.

MR. GUNTHER: Okay.

INTERVIEW OF DENNIS BOSCH

BY MR. GUNTHER:

Q. And, Mr. Bosch, could you give me your job title and affiliation?

A. My job title is collection services manager for the Wastewater Division with the City of San Bruno Public Services Department.

Q. And what's your formal education?

A. My formal education is high school, and I have a Collection System Grade 4 in wastewater maintenance management.

Q. Okay. Were you involved with the work that was done to replace the sewer in 2008?

A. No.

Q. Okay. What are your duties then?

A. My duties are normal daily operations and maintenance of the collection system. If there are some questions that people ask me I provide technical information.

Q. Question, at least in the accident area, they raised the sewage from, I think, a 6-inch line to a 10-inch line or something. Why was that upgrade made?

A. There was a volume conveyance problem. It wasn't able

to carry the amount of sewage from I&I from upstream in town, so we needed to upsize it so that it could carry the sewage and so there wouldn't be a spill.

Q. And does your -- and does also your sewage do your wastewater or storm drain or whatever or is that something else?

A. Something else. The sewage system is just the sewer and the storm system is separate.

Q. Okay. That's pretty much what I have.

MR. CALDWELL: No questions. Geoff Caldwell.

MR. DAUBIN: No questions.

MR. FASSETT: Bob Fassett, PG&E. Excuse me.

BY MR. FASSETT:

Q. So you handle sanitary as well as storm/sewer?

A. Just sanitary.

Q. Just sanitary.

MR. GUNTHER: Well, Mr. Bosch, that would be page 4 then. Thank you very much for that clarification.

BY MR. FASSETT:

Q. When was the sanitary sewer beneath Earl Avenue and Glenview installed?

A. Originally or --

Q. Yes, originally.

A. That was probably back when they did a development. I do not know the date or age to be exactly specific.

Q. That's okay. That will work. Just to confirm, we heard

that the diameter of the original sewer was 6-inch and you upgraded to 10-inch, is that correct?

A. Yes.

Q. What were the -- do you know what the general or random lengths of the original sewer pipe were?

A. I do not know exactly on that block. I mean it's customary anywhere between 2 and 4 feet of clay, but I do not know on that street.

Q. They're 2 to 4 feet random. What's the joint?

A. It's usually bell and spigot.

Q. Could you describe the performance or any problems associated with sanitary sewer lines between Earl and Glenview other than capacity. I got that one.

A. At that specific location of the intersection, none.

Q. Other than capacity there wasn't an issue, right?

A. Yeah.

Q. Could you describe the inspection and maintenance history of the sanitary sewer lines under Earl and Glenview?

A. The only inspection that we would do is a random inspection by two people on a truck and we would inspect that area just because of the amount of flow or strategic placement in the sense of other neighborhoods upline of that feeding through that area, and they would just inspect it to make sure that the flow was traveling normal and wasn't obstructed from anything.

Q. And how did they inspect it?

A. They opened up a manhole and looked down into the trough of the pipe in the manhole.

Q. So there were no camera inspections?

A. Not that I know of, no.

Q. Some of these we've already answered, so I'm writing the answers as I go.

A. No problem.

Q. When and how often was the sewer line invert surveyed? I think you just said randomly, but --

A. Yeah. We did a manhole inspection I think after 2006 or early part of 2007, so the manhole at that intersection would have been assessed, just looked at.

Q. But you knew there was a capacity issue?

A. Yes.

Q. So what told you there was a capacity issue?

A. Oh.

Q. What was the issue that said this pipe's not big enough?

A. Basically after we had redone the -- I don't know if you've heard of the Rollingwood Sewer Project, to deliver more sewage farther downstream. We had an overflow due to the amount of I&I which obviously let us know that --

Q. What's I&I?

A. Infiltration and inflow, water that gets in -- the groundwater or rainwater that either by direct connection or through any other means of getting into water coming through a

hole in a manhole, just water that gets into the sewer system that is -- doesn't derive from sewage and, therefore, it overflowed upstream from there, so we knew that we had to upsize the line.

Q. So is it reasonable to say the inflow is coming from groundwater entering through the bell and spigot joints or some hole in the integrity of that system?

A. Inflow could be coming in from anywhere.

Q. But one thinks of a sanitary system as a tight system. Is that not a good assumption?

A. I wouldn't be able or have the experience to say that that's true or untrue.

Q. So I think you answered this. My notes say according to a presentation made to the City of San Bruno City Council on May 27th, 2008 that in January 2008 the sanitary sewer line reportedly overflowed at Sneath and Earl during a rainstorm. What was the cause of the overflow? That's what you said earlier, I believe it was?

A. Yeah.

Q. Were inspections performed on the sanitary sewer line following the overflow?

A. No.

Q. Were any remedial measures or repairs taken of the sanitary sewer lines following the overflow?

A. No.

Q. Patches were observed -- patches in the pavement of

Glenview Drive were observed above the sanitary sewer line prior to May of 2008. Patches are consistent with replacement of asphalt pavement above a trench to expose the sanitary line. Do you know when those repairs were performed?

A. There was no sewer repairs done in that intersection with my knowledge, and I don't know of any asphalt work that was done either. It wouldn't be my position to know.

Q. And you did no video surveys, is that correct?

A. No.

Q. Just to clarify, you were not involved in the 2008 sanitary sewer project?

A. I was never -- other than telling them at one point in time that we have a conveyance issue I wasn't involved in it.

Q. Okay. Thank you.

MS. FABRY: I have no questions at this time.

MR. SHORI: Sunil Shori, California PUC.

BY MR. SHORI:

Q. The Rollingwood Sewer Project that you mentioned, this is upstream then of Earl? Where exactly did that project center in regard to where you had the sewer overflow, I guess, at Sneath and Earl?

A. The Rollingwood Project, and there were several phases, was from Sharp Park Road on Susan Drive down Skyline, and then I believe terminated somewhere around the intersection of Sneath and Skyline or by Sneath and Earl. There was other parts of it that

-- another direction separate from this neighborhood down Claremont -- Catalpa Drive. And so -- but for your question, it was just -- the part that was on Susan Drive and part down Skyline Drive was the upstream part.

Q. So it would have been upstream of Sneath and Earl?

A. Yes.

Q. And why -- I guess does the system change diameter or something at that location in terms of why would you have the overflow there as opposed to farther down the line?

A. Because we had historically like a capacity issue depending on how hard it would rain, so we did, and we also upgraded a pump station farther down the line to mitigate all the capacity.

Q. And where was that pump station located?

A. At Sharp Park Road.

Q. So generally it was bringing more flow in, plus you had infiltration --

A. Yes.

Q. -- that was kind of compounding starting from what, Sneath and Earl down?

A. Yes.

Q. When you have an infiltration -- I mean generally you have outflow, too, through the same openings or where does -- where do you find -- if there is any such thing in terms of where you have most of the problems where inflows -- at least on the

pipe that's in the ground, where do you find those occurring? Is it on the top of the pipe, bottom of the pipe? Is it pretty much anywhere it's a loose joint? Is there any commonality to where you find more of your inflow situations?

A. If I can just request clarification. Are you talking about inflow into the pipe. You know, in other words --

Q. Yeah. We mentioned earlier that you can have inflow basically into the sewer system and it can occur from various sources. It can occur from groundwater going into the -- going to the sewer line. You can have it come through the -- flow basically down the manhole and then, you know, find it's way through that.

A. Right.

Q. I'm talking about -- as far as the pipe in the ground, is that generally where you find the breaks or the failures in terms of where inflow comes in?

A. So your question is is there one place more than another where --

Q. Where --

A. -- inflow typically comes in?

Q. Yeah, generally for water that flows into the pipe itself, not through the manhole, but into the pipe itself.

A. It could be, you know -- inflow could be at a joint. Inflow could be on the laterals because laterals are closer in depth to the top of the ground. If there's a high water table,

you know, it could be leaching through, you know, maybe a hairline crack. I mean it's -- and I don't how to answer that question. I mean inflow can come in from many different places. I don't necessarily -- or it could be bad on a lateral, it could be bad on a main. It could be bad on a main or it could be bad on a lateral, so I mean I don't --

Q. And by lateral you're referring to the service connections --

A. Yes. Yes, from individual properties.

Q. -- from the main to the homes?

A. Yeah.

Q. And as far as leaching out, if you have inflow, do you generally also have outflow in the pipe in the ground or do you find leakage?

A. It's possible, but I mean sometimes you can find some discoloration around maybe like a joint, but it usually isn't -- I can't really -- since I'm not a water quality expert or a scientist I don't -- I can't necessarily say that that's leakage, but I mean you see some discoloration, but it just could be from -- I don't know. It could be just from the color of the ground or the clay for that long.

Q. Okay. In regard to the project to replace the sewer line at Earl and Glenview, you said you weren't involved with that other than turning it over to them and saying, hey, we need more capacity. But while that project was underway did you stop by,

did you have any opportunity to be at the site?

A. I stopped by once and I saw that they were pipe-bursting and then I kept driving. I just kind of wanted to see it.

Q. What did you see while you were there on that one time?

A. I saw a black HDPE pipe sticking out of the ground, and I believe I watched the contractor fuse it together once because I found that interesting and I hadn't seen it before.

Q. What about excavations-wise, what kind of excavations did you see at the site?

A. I didn't see anybody in the process of excavation. I just saw where the lateral connections to the main -- you know, the pothole sections where they have to -- I guess they bring the pipe through and they have to reconnect. I saw open holes. That was about it.

Q. So basically where you would have your lateral takeouts --

A. Yes.

Q. -- off the main?

A. Yes.

Q. But as far as any other excavations between the end points of where they might have brought the line in and where they might have taken the line out, did you see any excavations there?

A. Didn't see it. I mean I knew that they were there, but I didn't -- you know, one was at the other end of the block and one was at the other end, and I don't remember what time in the

process I came by, but I didn't really -- you know, I didn't really look.

Q. And when you saw the -- when the opportunity -- the one opportunity you were there, you said you saw the bell holes, the lateral connections. Were they -- was that already in phase of those connections being made?

A. I didn't look down the holes. I simply got out of my truck. I looked over. I saw that there was a couple of holes open. I walked up. I seen the contractor where he had the tube in the fusing machine. I don't know what you want to call it, but -- and I said oh, this is how you do it and they said yeah, and I said okay. And I said how's things going. They said good and I said okay, have a nice day. I got in my truck and I left.

Q. Did this project entail -- then in addition to replacing the existing sewer main with a polyethylene main were the laterals also replaced with new laterals or how did --

A. No --

Q. No.

A. -- they were not replaced.

Q. Okay. So whatever existing laterals were there were somehow --

A. Yeah.

Q. -- tied on to the new main?

A. Yes.

Q. And what's generally the material of your laterals? Is

there --

A. Existing is pretty much clay.

Q. And I guess there's a process where you're basically transitioning the clay and laterals to the polyethylene?

A. Yeah. I mean you got to couple it somehow. I mean I didn't watch them do it, but I mean normally if you have a -- you can either put a saddle on the pipe and then -- you know, and then either couple it with a band. I'm not sure what they did.

Q. That's it. Thank you.

MR. KATCHMAR: No questions.

MR. GUNTHER: No questions.

MS. MAZZANTI: No questions.

MR. SPERRY: Nothing.

MR. NICHOLSON: This is Matt Nicholson, NTSB.

BY MR. NICHOLSON:

Q. I've got some follow-up questions for you, Dennis. This infiltration that we're talking about here, I'm just curious. How do you know -- how did you determine it was infiltration? How do you know it's not running water from a business? How did you guys --

A. Because we only had a capacity issue in really bad storms.

Q. And you can time it to the storms?

A. Oh, yeah.

Q. Okay.

A. Yeah.

Q. Do you ever -- I mean so after you determined that you have infiltration and you timed it with the storms, do you ever go out to look for -- was there a study then to find out where it's entering during the storms or --

A. We've done a smoke test in one neighborhood that we thought was a probability and it only came up, I believe -- from my memory I think we only found two areas where -- you know, one was coming up through a lateral in the grass, and I think one maybe was coming out of a gutter pipe to a house, but --

Q. Okay.

A. And we didn't really -- we would -- kind of hoping we would find something, but it was nothing.

Q. Nothing. And nothing in the Earl/Glenview area of --

A. No.

Q. Okay. Is this -- you're calling this a main. Is it a force main or just gravity?

A. Just gravity.

Q. When you talk about these capacity problems, is it your project, do you scope this project or does it go to an engineer?

A. Yeah. Basically in operations we say we have a problem, and then I say this is the problem, you know, engineering, please help us with this, and then pretty much it goes to engineering. Like I said before, if you ask, you know, for technical information that, you know, would maybe help one way or another I

provide that, but it pretty much goes to Engineering to take care of it.

Q. Who would that be, who's the engineer?

A. The engineer that helped on this project, his name was Wing Wong.

Q. We talked about -- someone mentioned were there previous leaks in this area of Earl and Glenview and were any repairs done because of a pavement patch and you said you wouldn't know if those were performed.

A. As for just -- for typically an asphalt, like if it was a pothole or something, I don't -- that's another manager. That's the Street and Storm Water. So if it was a pothole or something I wouldn't know. As for a repair, the only thing that's been done in that area was the upsizing of the main that we're talking about.

Q. Okay. That was the last work done?

A. That was the last work done, yes.

Q. Okay. That's all I have. Thanks.

MR. CHHATRE: Ravi Chhatre, NTSB. Let me ask a follow-up question first.

BY MR. CHHATRE:

Q. You said that the last work done for the update was the replacement of the I guess a ceramic sewer pipe (indiscernible)?

A. Yes.

Q. Was the only work that was done -- was there any other

past leak histories in that area that you had to go and repair or fix?

A. Define the word leak.

Q. Meaning sewer coming out of the pipe.

A. Yeah. We had a vandalism, what we call a sanitary sewer overflow, I'm sorry, in a manhole that was approximately, I don't know, maybe 100 yards from that intersection where it was a locked down manhole. We believe someone introduced a bunch of rocks because we cleared the blockage and we got a bunch of rocks and almost boulders there. It was a locked down mechanism. When we found it the lock was missing, and so someone -- somehow they vandalized it, cut the lock, and we believe threw something in there, or at least there was rocks in there, I mean large size rocks, so we got them out. That was in 2006. As part of that whole scenario there was -- that overflow that happened, it made a turn and goes out on Claremont and we got rocks out of those, so it got it kind of pushed down.

Q. And that would be downstream --

A. Downstream.

Q. -- of the gas location?

A. Yes. I mean roughly -- you know, I don't have a meter, but 100 yards maybe.

Q. Did I hear correctly that Glenview Drive after the rupture going further north goes uphill?

A. Yeah.

Q. So would there be a leak, would that leak follow through and come downhill towards the rupture location?

A. Well -- so Earl hits Glenview. Then Glenview goes up.

Q. Right.

A. Actually Glenview is like this, right?

Q. Right, exactly.

A. The sewer goes towards the canyon where there used to be a park --

Q. Okay.

A. -- and then turned through two houses on the Claremont ---

Q. Okay.

A. -- and then hits Claremont and then turns down and goes down the canyon through that way.

Q. Okay. So it doesn't have too much of a downflow, I guess, slope if you would?

A. Oh, no, it's got -- it moves at a --

Q. Okay.

A. -- a good rate of speed, yeah.

Q. And how would you typically know there's a leak in your sewer system short of things showing up on the street?

A. Basically there's -- the only two ways that we know of a overflow is either by our crew catching it or by a call from the public.

Q. But how do you differentiate when the water flow is

exiting your pipe in a crack of some sort?

A. The only time there's going to be an overflow is if there is -- the pipe surcharges, and then the level inside the manhole or the pipes start feeding, and then so it eventually, you know, comes out and overflows out of a manhole. It's not like a water main where if it's -- since it's pressurized all the time it forces water up through the ground, up through the asphalt, up through the concrete, up through the grass, whatever. Mostly the leaks come up through a manhole or they back-feed up a service lateral.

Q. Okay.

A. Yeah.

Q. But you don't have any leaks where the pipe had cracks where the sewage is leaking in the ground?

A. There's nothing -- there's been no -- a time or a water quality sample or whatever where -- or a soil sample taken that would prove that that's happened.

Q. And is that true in the rupture location also --

A. That's --

Q. -- no leaks?

A. No. There was -- no, no.

Q. What is typically the size of a lateral coming from the homes?

A. Four-inch.

Q. So 4-inch lateral and 6-inch main in the past?

A. Yes.
Q. And 4-inch lateral and 10-inch main now?
A. Eight or 10-inch, yeah.
Q. But the replaced pipe at the rupture location is damaged?
A. Yes.
Q. Can you give us some information about yourself, like formal education that you have?
A. Okay. I went to private high school. I went to private grammar school, went to -- I'm a former police officer. I'm still a current reserve police officer with the City of San Bruno. I've been to multiple technical schools for sewer pump maintenance and other kind of maintenance-related industry standards and best management practices. I hold a Grade 4 collection system management certificate with the California Water and Environment Association, and -- that's pretty much it I guess.
Q. Okay. I think you mentioned that earlier. I just asked it just one more time. And how many years you are with the City?
A. All told, I started my 21st year in October.
Q. So you joined in --
A. October 15th, 1990.
Q. Okay. That's all I have. Thank you so much.
A. No problem, sir.
MR. CHHATRE: Any follow-up questions?
MR. FASSETT: Just one follow-up question in regards to

the project at Earl and Glenview.

BY MR. FASSETT:

Q. You had said that you had realized that there was a capacity issue after the Rollingwood Sewer Project, is that correct?

A. Yes.

Q. And then -- but wasn't the change order that put that in associated with Rollingwood Sewer Project?

A. Okay. So --

Q. I mean from what I understand. I mean it was something that we did, I believe, I'm not sure, but I mean under that name.

A. So prior to the Rollingwood Project being finalized and closed out there was a change order issued based upon what was known from the work that was done prior to that?

Q. I'm not sure when the Rollingwood project was finalized, but it was done, I believe, as part of that, yeah.

A. I have no further questions.

MS. FABRY: Klara Fabry. Dennis, if you could just clarify. You have in -- you had, you said, a sketch of the intersection. If you can just show on that map where that sewer overflow, vandalism overflow, that you had referred to is located.

MR. CHHATRE: And, Dennis, if you would please use a different sheet?

MR. BOSCH: Yeah. This is the, I don't know, rough sketches, kind of like -- I want to call that the soil of the

canyon. So the crater's here. The manhole's here. The sewer line comes down Earl. The 6-inch sewer comes in this way. The 10-inch then goes across, and there used to be like a little park, play swing structure.

MR. CHHATRE: Can you please write down the sizes on that sketch, 6-inch, 6-inch, 10-inch?

MR. BOSCH: This is a, yeah, 6-inch clay; 10-inch, 10-inch.

MR. CHHATRE: Clay?

MR. BOSCH: No. This is HDPE. So it goes to a manhole. Then it goes farther back, maybe a 10-inch HDPE.

MR. CHHATRE: For the record, can you spell what HDPE stands for?

MR. BOSCH: Height density polyethylene.

MR. CHHATRE: Okay.

MR. BOSCH: Do you want me to write that out?

MR. CHHATRE: No. It's so the transcriber will know what that is.

MR. BOSCH: Oh, I got it, okay, yeah. Yeah, polyethylene I might have had a problem with. Okay, so here we go. There are or there was a house. I'm not sure what the addresses are. And so the sewer line hits there, goes here, goes here, and this is where we had the -- that's where we had the vandalism SSO, sanitary sewer overflow, and I can't remember the exact date, but it's 2006, maybe April 2006.

UNIDENTIFIED SPEAKER: Can I ask that you put the direction of flow?

MR. BOSCH: Yeah, no problem. So let's do this. Is that good? Sorry, if that's not too legible.

UNIDENTIFIED SPEAKER: And can you label north on there, too, please?

MR. BOSCH: North would be something like --

MR. CHHATRE: It should be going --

MS. FABRY: No.

MR. BOSCH: No?

UNDENTIFIED SPEAKER: Yeah, you're right.

MR. CHHATRE: Yeah.

UNIDENTIFIED SPEAKER: He's getting supremely technical.

MR. CHHATRE: Now that you have done such a good job here would you mind putting the date and your initials so we can put in the document?

MR. BOSCH: Yeah, no problem.

MS. FABRY: Thank you. I have no more questions.

MR. BOSCH: 1/3/11.

MR. CHHATRE: Okay.

UNIDENTIFIED SPEAKER: You want to autograph the bottom?

MR. BOSCH: Just as long as you don't put it in C-SPAN.

MR. CHHATRE: Okay. Go ahead.

MR. SHORI: I have one follow-up.

MR. CHHATRE: Identify.

MR. SHORI: It's Sunil Shori, California PUC, and that's Public Utilities Commission.

BY MR. SHORI:

Q. You talked about the manhole that was assessed and I forget -- I didn't catch what year it was, and can you talk about which manhole you were referring to as far as you having assessed it?

A. Well, every manhole in town was.

Q. In what year now?

A. Late '06, early -- some part of '7. I mean it just depends on what time the guys actually rolled out there and canvassed that particular neighborhood.

Q. And that's -- what frequency do you do that kind of maintenance, is it an annual, is it --

A. That was the first time that we had done something like that, and I'm assuming that we're going to do it in the future again. I don't know what the level of revisiting it would be.

Q. And, again, just so I have it clear, so what necessitated it then as opposed to previous years?

A. Well, basically as best management practices for the industry had kind of ramped up -- we hadn't done something like that before. We also wanted to make sure that we had no cross-connections between sewer and storm because it was prevalent in the sewer industry that if you had a construction back in whenever, the '30s, '40s, '20s, '50s, that if you had a sewer that

it could possibly surcharge. Instead of having it come up over into -- you know, up in the ground it would then flow down a pipe to a storm drain system. So that's against the law now, so we also wanted to make sure that we had -- make sure that we had crossed -- we had captured and stopped all cross-connections.

Q. And then, again, as finding all those -- or any existing cross-connections of that type, you basically physically would have to go in the hole and --

A. Right.

Q. -- run cameras to figure out what the sources are or how do you make that determination?

A. We do a dye test, introduce water. You know, if we saw a pipe kind of at a higher elevation, because I mean sewers are usually at the bottom unless there's like a drop-in or something, but if it's a sewer there's usually something running, you know, most of the time. If we saw a pipe that didn't look right we'd stick a hose down it, and then we'd go to the next surrounding storm drains and listen for water or watch water come in or not. So we've got all of the ones that we know about and I feel confident that we have.

Q. And so at this stage it's an annual inspection then for you folks to do this going forward?

A. Yeah. I mean we do annual inspections for lots of different reasons. Sewers can carry anything, you know, G.I. Joe dolls to other things that people want to flush down the toilet,

so we just want to make sure -- to guarantee that our system is working accurately and that there's not an overflow that, you know, could be bad for the public.

Q. Okay. Thank you very much.

MR. CHHATRE: Any other follow-up questions?

MS. FABRY: Klara Fabry.

MR. CHHATRE: Bob?

MR. FASSETT: Bob Fassett, PG&E.

BY MR. FASSETT:

Q. You mentioned the sanitary sewer overflow. I didn't catch what date you said that was.

A. It was in '06. I can't remember --

Q. Somewhere in '06?

A. Yeah.

Q. And which of those manholes actually overflowed?

A. This manhole right here, and I would say -- I said a hundred yards. I don't exactly know, but I mean it's a good distance.

Q. That's off Claremont?

A. Yeah. So this is --

Q. Okay. Thank you.

MS. FABRY: Klara Fabry.

BY MS. FABRY:

Q. As far as this ongoing video inspection project, did you do any inspection -- did you do an inspection for this area?

A. The project encompassed the entire town. The line on Earl hasn't been done just because it was brand new, and I can't remember if we've done anywhere else in that area to this point.

Q. Thank you.

MR. CHHATRE: Any other questions? If, not --

MR. NICHOLSON: I've got one.

MR. CHHATRE: Okay. Identify.

MR. NICHOLSON: Matt Nicholson, NTSB.

BY MR. NICHOLSON:

Q. Since the line size increase project have you had any more over capacity issues or over -- you know, low capacity or --

A. Yeah. Non-conveyance? No.

Q. No. So that corrected it?

A. Yes.

Q. Okay. Even during storms?

A. Even during storms.

Q. That's all. Thank you.

MR. CHHATRE: Any other questions? If not, thank you so much for your time --

MR. BOSCH: Not a problem. Thank you.

MR. CHHATRE: -- and your help in this investigation.

MR. BOSCH: Not a problem. Thank you.

MR. CHHATRE: Off the record.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	PACIFIC GAS & ELECTRIC COMPANY SEPTEMBER 9, 2010 ACCIDENT SAN BRUNO, CALIFORNIA Interview of Dennis Bosch
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.

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Cheryl L. Phipps
Transcriber